ROUND TABLE MEETING RESULTS

WASHINGTON STATE'S SOLID WASTE PLAN REVISION

ROUND TABLE MEETING SERIES

INPUT

JUNE 2001

WASHINGTON STATE DEPARTMENT OF ECOLOGY

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INTRODUCTION

This document records and summarizes the input provided on the Washington State Solid Waste Plan revision by people who attended round table meetings between March and June of 2001. This report is not a decision document; rather, it is a compilation of ideas and comments recommended by meeting participants. The recommendations from the meeting attendees include thoughts about a statewide long-range vision; priority issues to address; interim goals; and various courses of action to consider in the plan revision project.

The state solid waste plan is to serve as an overall guide and framework for all solid waste activities in Washington State. Required by state law (RCW 70.95.260), it is a set of policies and actions that coordinates and guides all solid waste-related programs and services throughout the state. The intent of the state plan is to lay out a course of action for meeting both existing needs and future needs. It includes goals for the future and strategies for reaching those goals. The existing state plan was last updated in 1991, and is out of date for many reasons. For example, new waste streams have emerged, Washington's population has increased significantly, and economic and environmental conditions have changed greatly during this period. Resource use and waste generation continue to increase, while recycling rates are actually declining.

The Washington State Department of Ecology (Ecology) has convened a process to revise the state solid waste plan. The goal of this revision is to better understand the current challenges facing the solid waste system in Washington and to more actively plan for the future. It is critical that this plan revision provide the necessary direction on how best to support the current system and its needs while, at the same time, putting in motion the necessary steps that will move the state solid waste system to become more sustainable. Since early 2000, Ecology Solid Waste and Financial Assistance Program staff have been working with stakeholders to gather input on the issues to be addressed in this revision.

The ideas and information contained in this report from the round table meetings, as well as other input from Ecology staff and external committee members, will be used to determine which key issues and potential strategies will be addressed in the state solid waste plan revision.

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BACKGROUND

Ecology staff have been working with State Solid Waste Advisory Committee (SWAC) members, state and local government representatives, and other stakeholders. Local solid waste management plans were reviewed from around the state and focus groups were held to identify needs and issues for the state solid waste plan revision. A long-range vision was drafted that reflected the feedback from these initial meetings.

Between October 2000 and March 2001, Ecology worked with more than 60 participants in writing 10 issue, or background, papers, on various solid waste issues and topics. The issue papers and the draft long-range vision served as the foundation for discussion at the round table meeting series. *The Issues Identification: Issues for Consideration and Discussion*, Ecology Publication #01-07-001, contains nine of the issue papers; an additional paper on costs is not yet complete.

The Sustainable Vision for Washington's Solid Waste System Round Table Meeting Series brought together communities, businesses, and government to review the draft vision and identify priority issues to include in the plan revision. From March through June 2001 a series of meetings was held in each of four locations throughout the state – a total of 16 meetings – to develop regional recommendations for revising the state solid waste plan. Participants worked with information contained in the *Issues Identification: Issues for Consideration and Discussion* document and explored additional issues for consideration in the revision.

The round table meetings were designed to provide interested parties the means to have the maximum possible input to the state solid waste plan. All meetings were open to the public and heavily advertised. Invitations were mailed to more than 2,500 people, hundreds of people were personally phoned, and regular e-mail messages were sent directly to hundreds of people and forwarded on to organization membership e-mail lists. Some radio and newspaper coverage also helped to publicize the round table meetings.

Through a competitive process, Ecology procured the services of an independent facilitation contractor. Resolution Services, LLC, designed and facilitated the round table meetings and documented the proceedings of participant work. Throughout the round table series, participants identified solid waste issues of high importance from their diverse perspectives. 165 participants contributed their views on what they would like to see for the solid waste system in the long-term future, and how best to address the current solid waste system and its needs.

In 1999, residents and businesses in Washington generated approximately 6.5 million tons of waste or 7.78 pounds per person per day. This figure represents only a fraction of the total solid waste generated every year in our state. *(Solid Waste In Washington State: Ninth Annual Status Report. Washington State Department of Ecology, Solid Waste and Financial Assistance Program. December 2000. Ecology Publication #00-07-037)*

In 1990, Washington was recycling 34 percent of its solid waste. Despite recycling being our highest priority focus for the past decade, we have not achieved the goal of 50 percent recycling of our solid waste, and in fact, are now at 33 percent and dropping. *(Solid Waste In Washington State: Ninth Annual Status Report. Washington State Department of Ecology, Solid Waste and Financial Assistance Program. December 2000. Ecology Publication #00-07-037)*

While working in 'perspective groups,' attendees provided insight on solid waste from the unique views of community and civic groups, business, environmental interests, government, and the solid waste industry. These groups did not function as representative groups for these sectors. Instead they served as a way to allow people to work in small groups with others that may have shared similar views. As the meeting series progressed, people from different perspective groups worked together to identify key issues and common views on solid waste issues.

ROUND TABLE MEETING OUTCOMES

The outcome of the round table series – regional recommendations – provides a clearer picture of the views from around the state regarding the solid waste system. Meeting participants identified solid waste issues of high importance from their perspectives. Urban and rural conditions, population density, economic conditions, and transportation distances all impact the state's solid waste system, which creates the need for a state plan that is responsive to the diverse characteristics of the state. The recommendations also reveal many commonalities. The main body of this report provides both the vision and goals in common across the state, as well as the distinct regional needs to be considered. The appendices contain listings of all ideas and results from each set of regional meetings.

For all the world's people to consume at the [typical North American] rate is a mathematical impossibility. It would require the productive land of four earths. *Ryan, John C., and Durning, Allen Thein . Stuff: The Secret Lives of Everyday Things. Seattle: Northwest Environment Watch, 1997.*

Ecology will review the vision, goals, and strategies identified by round table participants to determine the coalitions and partnerships that will be necessary to implement the future plan recommendations. The outcomes of the meeting series are recommendations to Ecology from each of the four regions to help determine the priority issues and action alternatives that will be included in the state solid waste plan revision. Next steps are being determined and a detailed project schedule and approach will be developed by Ecology.

PERSPECTIVES ACROSS THE STATE:

VISION

An important purpose of the state solid waste plan is to provide a unifying vision for the state, a statement of what everyone in the state should work together on to create a future that maintains a high quality of life for people in Washington.

The vision is written in the present tense and describes the conditions in place for solid waste many years from now. A draft vision was developed by Ecology staff in coordination with stakeholders prior to the round table meeting series. The original draft vision published in *Issues Identification: Issues for Consideration and Discussion* can be viewed on the project website at: www.ecy.wa.gov/programs/swfa/swplan.

Participants at the round table meetings discussed the challenges and opportunities that the original draft vision posed in their region. Throughout the round table meeting series participants provided input on a regionally recommended vision for the state solid waste plan, with final agreement on a draft vision reached in Meeting 4. Each regionally recommended draft vision is contained in the appendices of this document. Shared ideas from the four regionally tailored visions have been merged below into a draft statewide vision statement. This merged vision statement provides an overview of the common themes raised across the state.

Additional Thoughts on a Vision from each Region

CENTRAL - WENATCHEE

1. *Movement toward a sustainable integrated system is a progression over time.*
2. *Businesses' economic survival is fundamental in moving toward sustainability. The region's cultures and historical economic activities are considered important.*
3. *Individuals are environmental stewards.*
4. *Financial constraints are considered in implementation design.*
5. *Roles of the state and local jurisdictions are clear; state and local government work together to set long term goals and initiatives.*
6. *Solid waste regulations and initiatives allow local jurisdictions to set levels for goals and sustainable program development.*
7. *Education, which spans across all solid waste issues, is incorporated in each community.*

EAST - SPOKANE

1. *A sustainable economic system exists.*
2. *Existing resources are maximized to support a sustainable approach and it is cost effective.*
3. *Manufacturers share responsibility for their product and packaging wastes. Product stewardship is addressed in a realistic manner, given the unique challenges for rural communities.*
4. *The impacts of life-cycle costs on consumer choices are equitable to all individuals.*
5. *Local jurisdictions are empowered with the flexibility to address the unique conditions of their region.*
6. *Sufficient state solid waste funding is mandated.*
7. *State and local governments work cooperatively to find workable funding mechanisms.*

MERGED LONG-RANGE VISION

The following vision statement describes a future for Washington State, perhaps 50 years from now or more. It is written in the present tense to convey what will be in place when the vision is achieved.

The solid waste system for Washington state is based on the principles of sustainability, which is generally defined as 'meeting the needs of the present without compromising the ability of future generations to meet their own needs.' All residents are engaged in meeting the economic, environmental, and social needs of our diverse state. An integrated system handles materials with an increased emphasis on waste reduction; resource and energy conservation; material reuse; and pollution prevention. Efforts to protect the environment, human health and economic development have merged.

BUSINESSES balance material and energy use with practices that reinvest in environmental, social, and financial capital, recognizing that such stewardship is the basis for their survival and presents opportunities for increased profit. Businesses actively engage in product stewardship practices.

INDIVIDUALS recognize their role in achieving and maintaining sustainability as consumers and residents. When choosing to purchase, they demand, are provided with, and select goods and services with the lowest life-cycle impacts on the environment.

GOVERNMENT policies provide incentives to businesses and industry to achieve and maintain sustainability. Government works together to address the unique needs of urban and rural communities and to develop integrated systems through actions such as coordinating solid waste planning.

COMMUNITIES actively engage in and support economic, environmental, and social equity. Local systems are sustained that support development within the limits of the environmental carrying capacity.

NORTHWEST - SEATTLE

1. *Materials are handled sustainably through such practices as product stewardship.*
2. *Current needs are addressed while preparing for future opportunities and challenges.*
3. *Include that no waste is generated in the state.*
4. *Solid waste system is the cornerstone to the state's move to sustainability.*
5. *Government policies drive sustainability.*
6. *Businesses are product stewards.*
7. *Communities foster their long-term viability through shared ownership and pride in the benefits of sustainability.*
8. *People may choose to reduce consumption.*
9. *People are aware of how local choices impact global resources.*

SOUTHWEST - VANCOUVER

1. *A unified approach is taken, with increasing emphasis on resource and energy conservation.*
2. *Industry recognizes their role in preventing waste in product and packaging development.*
3. *Material reuse and recycling by private enterprise and small business is supported.*
4. *Government leads by example.*
5. *Regions work together with individual communities to address solid waste issues.*
6. *Public health and education are emphasized as the foundation for addressing solid waste issues.*

PERSPECTIVES ACROSS THE STATE:

MILESTONE THEMES

Milestones serve as landmarks to help measure progress toward the envisioned future solid waste system. Round table meeting participants drafted milestones, or goals along the way, toward a more sustainable approach to solid waste in Washington state for both the long-range vision and the current system needs.

The facilitators grouped the milestones under topic headings and captured the themes in summary statements for each topic. At the subsequent round table meetings, participants in each meeting location identified the most important issues out of the approximately 18 topical groupings. They worked together to revise the summary statements to better reflect the goals they identified as critical to the state solid waste plan. The complete, regionally-specific milestones and summary statements are located in the appendices. The following represents the themes in common across the state regarding those key issues that were among the 11 most important in at least three of the four regions. Many similarities were found.

In many cases, the milestone statements included timeframes, percentages, and other quantifiable factors. While these are needed in establishing interim goals for the state, the numbers selected at the different meeting locations vary so widely that they have been removed from the statements in common around the state that are contained in this section. All dates and percentages recommended by participants are still reflected in the appendices of this document exactly as they were proposed in each meeting location. It is recognized that one of the next steps in the plan revision process will be to determine the quantifiable and measurable components (i.e., how much and by when) of each goal that will be included in the plan. Without quantifiable targets and timeframes, it is virtually impossible to measure progress toward goals or to know when they have been reached. Ecology staff will draft feasible targets and timeframes based on research and on what was supported by the round table meeting participants.

Milestone topic headings that were among the most important in at least three of the four meeting locations across the state

Actual and complete costs of solid waste

Changing behaviors and attitudes

Consumer and industry incentives

Recycling

Addressing special waste streams

Funding for government solid waste programs

Product stewardship

Recycling market development

Reduction of toxins

Waste prevention

Landfills

Under each of the following key issue headings is a summary of themes specifically found in common in at least three of the four regions. This summary is followed by a compilation prepared by the facilitators that captures the ideas heard across the state regarding each key issue and milestones.

ACTUAL / COMPLETE COSTS OF SOLID WASTE

THEMES IN COMMON ACROSS THE STATE:

A model to identify the "actual and complete costs" of solid waste handling and disposal will be developed. In addition, full cost accounting will be used to identify the complete social and environmental costs of materials production. This information will be used to educate consumers, businesses and government about the actual and complete impacts of products and waste disposal.

The compilation of ideas shown below about actual/complete costs of solid waste represents one way of reflecting what was heard around the state.

Educational programs will be developed for consumers, citizens, businesses, and government agencies on the environmental costs of solid waste and life cycle assessment tools. The public will be informed regularly of the "actual and complete costs" of solid waste.

The state will develop a model to identify the actual and complete costs of solid waste. Industry targeted incentives will be developed and in place that reflect actual and complete costs and environmental impacts. The system and incentives will make it easy for government and businesses to use life-cycle cost accounting for measuring waste generation and environmental performance.

The full social and environmental costs of materials production and waste hauling will be reflected in rates and pricing structures, waste disposal, and recycling. Over time, the costs of waste disposal of products will be internalized and included in the prices of products, and rate structures will be changed to reflect the true costs.

CHANGING BEHAVIORS AND ATTITUDES

THEMES IN COMMON ACROSS THE STATE:

Community education programs will convey the message of waste reduction, recycling, and materials reuse to all levels within the community. A noticeable change in behavior and attitudes will be realized as a result of ongoing education on the impacts of solid waste.

The compilation of ideas shown below about changing behaviors and attitudes represents one way of reflecting what was heard around the state.

Community education programs will convey the message of waste reduction, recycling, and materials reuse to all levels of the community: children, general public, public officials, and industry. Government and media will cooperate in increasing public awareness about solid waste solutions, including the actual and complete costs of solid waste and products, resource conservation, and sustainable product purchasing.

A noticeable change in behavior and attitudes will be realized through ongoing education on the impacts of solid waste. The number of low-impact products and their purchase will be increased as consumers make purchasing decisions based on the environmental impact of the product. Consumers and public officials will understand how waste management issues are related to growth and consumer habits.

CONSUMER AND INDUSTRY INCENTIVES

THEMES IN COMMON ACROSS THE STATE:

Incentives will exist in Washington state that promote waste reduction, resource conservation, increased recycling, and low-impact product industries.

The compilation of ideas shown below about consumer and industry incentives represents one way of reflecting what was heard around the state.

Financial incentives will exist in Washington state that promote reuse, recycling, conservation, pollution reduction, and improved solid waste handling by businesses and individuals. Waste reduction and low-impact product industries are supported through incentives and proactive relationships between government and businesses.

RECYCLING

THEMES IN COMMON ACROSS THE STATE:

The volumes, percentages, and range of materials being recycled in Washington will increase significantly. Nearly all materials currently considered waste will be resources or products.

The compilation of ideas shown below about recycling represents one way of reflecting what was heard around the state.

Recycling services and their efficiency will be increased statewide. Recycling operators will employ better technology and more sustainable practices. Incentives such as streamlined permit processes will result in more recycling and composting facilities in our communities. Mandates for recycling will consider the markets and facilities to support such rates.

Nearly all materials currently considered waste will be resources or products. Demand for all traditional recycling commodities will be high and a major portion of all solid waste materials will be reused or recycled into useful products. A significantly smaller portion of total residuals will require expensive disposal. Recycling opportunities will exist statewide for problematic materials such as glass, tires, electronics, petroleum, and organic liquids.

ADDRESS SPECIAL WASTE STREAMS

THEMES IN COMMON ACROSS THE STATE:

Hard-to-manage or problem wastes will be diverted from disposal. Facilities and/or processes will be in place to recycle or treat these materials.

The compilation of ideas shown below about addressing special waste streams represents one way of reflecting what was heard around the state.

Alternatives will be identified for hard-to-handle materials and waste recycling processes will be implemented. Special waste streams such as (but not limited to) tires, construction debris, electronic waste, industrial wastes, and heavy metals will be diverted from landfills. Livestock waste, food, and all green waste will be composted. Facilities to treat or recycle various "problem" wastes will be in place, including the treatment and/or recycling of all infectious biomedical waste according to statewide standards.

FUNDING FOR GOVERNMENT SOLID WASTE PROGRAMS

THEMES IN COMMON ACROSS THE STATE:

Stable and long -term funding sources will be in place to implement state and local solid waste plans. This funding will not be dependent on the generation of waste.

The compilation of ideas shown below about funding for government solid waste programs represents one way of reflecting what was heard around the state.

Solid waste program funding will not be dependent on the generation of waste and diversified alternatives to tipping fees will be explored. From here out, costs will be shifted to those who generate waste so future generations are not burdened by the past.

There will be stable and long-term funding sources to implement state and local solid waste plans. Funding mechanisms for local government will be in place at adequate levels to implement and evaluate goals outlined in state and local solid waste plans

PRODUCT STEWARDSHIP

THEMES IN COMMON ACROSS THE STATE:

Businesses will increasingly incorporate product stewardship practices. Reused/recycled materials will increasingly provide the needed resources for manufacturing.

The compilation of ideas shown below about product stewardship represents one way of reflecting what was heard around the state.

Voluntary product stewardship activities will be implemented by more and more companies within key industries. Packaging and 'big ticket' consumer products will be manufactured with reuse, recycle, or take back included in their design. Product stewardship principles are identified for Washington state-based industries, and strategies are supported with feasible options.

Government policies and incentives will be in place that support the use of sustainable materials and reduction of material intensity and toxicity. Product stewardship strategies will target high risk materials and durable good products. Non-renewable resources used in production will be significantly reduced and re-used/ recycled materials will provide a significant portion of resources for manufacturing.

RECYCLING MARKET DEVELOPMENT

THEMES IN COMMON ACROSS THE STATE:

Stable markets will be developed for recyclables and recycling services will be readily available.

The compilation of ideas shown below about recycling market development represents one way of reflecting what was heard around the state.

Strategies will be in place at the state and local levels to promote recycling market development for organics, plastics, paper, and hard to recycle materials. Market development efforts will first identify targeted materials and then create and assist businesses that will utilize currently collected and additional potentially viable materials for reuse and recycling.

There will be an increase in the percentage of local materials reused locally. State institutions will buy recycled content products. Re-use options will exist for all materials, and stable markets will be developed for recyclables. Recycling services will be readily available.

REDUCTION OF TOXINS

THEMES IN COMMON ACROSS THE STATE:

Toxins in products and wastes will be reduced significantly.

The compilation of ideas shown below about reduction of toxins represents one way of reflecting what was heard around the state.

Toxins entering landfills and energy recovery facilities will be significantly reduced. Efforts will be targeted at toxin reduction in industry and production practices. Over time, toxins in products and waste will be reduced and eventually eliminated. Non-toxic and minimally-toxic products will dominate the market place, and incentives will encourage manufacturers to use recycled or high-recycled content feedstock materials.

WASTE PREVENTION

THEMES IN COMMON ACROSS THE STATE:

Waste generation will decrease significantly.

The compilation of ideas shown below about waste prevention represents one way of reflecting what was heard around the state.

Waste generation rates will be reduced and per capita waste generation will decrease each year. Wastes that are generated will be handled by alternative processes that utilize the materials for other production activities. The reutilization of a variety of materials, including construction and manufacturing, will be promoted. Waste prevention policies and manufacturing practices will exist that maximize product life. The public will support waste minimization strategies, reductions in non-essential packaging, and reusable packaging.

LANDFILLS

THEMES IN COMMON ACROSS THE STATE:

Closed and abandoned landfills and dumps will be identified, assessed, and cleaned up as needed.

The compilation of ideas shown below about landfills represents one way of reflecting what was heard around the state.

All landfills will be assessed, closed if required by regulation, and clean-up will begin. Where feasible, abandoned/closed landfills will be mined to make use of disposed products.

PERSPECTIVES ACROSS THE STATE:

STRATEGIES

While the milestone statements and ideas in the previous section represent short-term and mid-range goals, or "what" needs to be accomplished to make progress toward the long-range vision, the strategies and approaches contained in this section represent potential actions or "how" the goals could be accomplished.

During the round table meetings, literally hundreds of ideas were raised about actions that could be taken to improve existing solid waste services and programs, and also to begin working toward the system and future that is described in the long-term vision. Many of the strategies and approaches proposed in one round table meeting are similar or identical to those developed in other round table meeting locations. While time was not available during the round table meetings to prioritize or discuss these strategies in-depth, a number of clear themes emerged.

This section does not represent actual decisions about the actions that will be pursued; rather, this is a list of the types of approaches and strategies that will be considered for further analysis. Ultimately, the state solid waste plan revision will contain a set of proposed actions and policies for reaching the short-term and some of the mid-range milestones. These will be the actions that participants in the planning process agree hold the greatest potential for meeting the plan goals.

Participants in the round table meetings were asked to identify strategies in conjunction with specific milestones they had developed. Often, similar strategies were identified to meet a variety of different goals. In this section, the strategies and approaches have been summarized and compiled under similar themes and are not connected with specific milestones or issue areas. It is expected that implementing these types of actions would result in progress and/or improvements in a number of areas.

The action themes listed here are organized under broader categories for organizational purposes only. Strategies and ideas are paraphrased and summarized under common themes. Many of the ideas brought up during the round table meetings are not included in this section as they did not appear to be common among meeting locations. All of the strategy and action ideas that were raised are contained in their entirety in the appendices of this report.

This section does not represent actual decisions about the actions that will be pursued; rather, this is a list of the types of approaches and strategies that will be considered for further analysis. Ultimately, the state solid waste plan revision will contain a set of proposed actions and policies for reaching the short-term and some of the mid-range milestones. These will be the actions that participants in the planning process agree hold the greatest potential for meeting the plan goals.

COMMON STRATEGIES AND IDEAS

ACTUAL AND COMPLETE COSTS

- Assess actual and complete costs of disposal and recycling, and internalized, externalized, and hidden costs, then evaluate solid waste system based on this information
- Provide information on the actual and complete costs of solid waste handling to the public
- Determine how to calculate external costs of manufacturing
- Provide information on actual and complete costs of products to the public

ECONOMIC TOOLS AND INFLUENCES

- Provide tax credits and incentives for business practices that: reduce waste and toxicity; meet recycling, reduction and reuse goals; reduce packaging; take back products; or, use green development and sustainable business practices
- Eliminate subsidies and incentives for using virgin materials and consider taxing use of virgin materials
- Tax products and manufacturers based on toxicity levels, disposal costs, durability of product, recyclability of product, and/or amount/type of packaging
- Structure solid waste handling and disposal rates to provide significant incentives to generate and dispose of waste, including charging actual costs of recycling and solid waste handling to customers and incorporating the costs of post-closure conversion of existing landfills,
- Make grants available to businesses for innovative new sustainable products or practices
- Create financial incentives and economic certainty for private sector investment in increased recycling and waste diversion (esp. solid waste industry)
- Products are labeled with percentage of recycled content and recycled goods cost less than those produced with raw materials
- Create incentives that voluntarily minimize pollution and hold polluters accountable through fines and regulatory fees

EDUCATION

Fund, establish, and conduct ongoing education, information, awareness and involvement programs targeted at: students at all levels; higher education; adults and community members; consumers; business and industry; and, institutions and government organizations at both state and local levels

THESE EFFORTS SHOULD COVER:

- Waste prevention
- Reuse
- Recycling
- Impacts of waste, including the externalized (actual) costs of waste
- How consumer demands and choices can impact health and the environment
- Consumer behaviors that can make significant positive impacts
- How environmental issues affect industry, local economy, environment, and citizens

- Product stewardship and manufacturer responsibility
- Sustainable design and building
- Backyard composting and options for organic waste
- Litter and illegal dumping impacts and prevention

FUNDING FOR GOVERNMENT SOLID WASTE PROGRAMS

- Establish a stable and diversified funding mechanism that is not based on waste generation to fund local government solid waste operations and programs on recycling, waste prevention, and other non-disposal related issues.
- Maintain state grant programs and modify them to allow more flexibility and broader use, including funding for operations, capital replacement, waste prevention, adequate oversight, and addressing closed landfill and dump sites

INFLUENCE CONSUMER PURCHASING

- Establish consumer incentives for choosing products and services with the least environmental and health impacts, and for demanding more durable and repairable goods.
- Establish 'green' labeling system, including monitoring
- Encourage reusable containers at restaurants, etc.

LITTER AND ILLEGAL DUMPING

- Increase education and enforcement of littering and illegal dumping regulations
- Education campaign to make littering and illegal dumping socially unacceptable and to reveal clean-up costs to citizens
- Develop partnerships with state and local agencies and funders to clean up illegal dumps

MATERIALS MARKET DEVELOPMENT

- Create state market development entity and aggressively pursue new industries that use recycled content
- Establish environmentally preferable purchase requirements for all levels of state and local government
- Establish required sustainable building practices for state and local government projects
- Require use of compost in government facilities and incorporate in planning and development policies
- Set targets for recycled product content
- Develop accessible information about recycled-content products and promote material exchanges
- Require labeling of recycled content on products
- Mandate in-house government recycling programs for as many materials as possible
- Showcase demonstration projects that use recycled content and/or reuse materials to promote green development

- Develop partnerships with architects, engineers, educators, developers, and construction industry to promote reuse and reduction in building
- Institute disposal bans for certain products and materials
- Require recycling in the private sector
- Invest public funds in recycling and composting infrastructure

PLANNING

- Establish goals, including regional goals, for reducing waste generation and for recycling in all waste streams. Develop strategies and plans for effectively addressing wastes that are hard to manage
- State and local plans must address regional capacity needs, transport distances, etc., for composting, recyclables processing, and construction and demolition materials
- Conduct waste characterization studies to quantify and characterize all solid wastes and options for reuse
- Identify product stewardship principles
- Evaluate actual costs of solid waste system including externalities
- Establish statewide baseline of abandoned landfills, so sites can be ranked for clean-up or mining priority
- Buy off by partners in implementation and funding of solid waste plans needs to be sought
- Local plans and state rules need to be coordinated to better serve the diverse needs of the state's regions

PREVENT WASTE FROM BEING GENERATED

- Discourage excess production of materials and encourage business development for repair of products
- Update building codes to require new construction to be more energy efficient and generate less waste in their maintenance
- Change policies and or laws to reduce or eliminate 'junk' mail, excess packaging, non-recyclable plastics, fully disposable products, etc.
- Market local agricultural products for local use

PRODUCER RESPONSIBILITY

- Support business in incorporating sustainable practices through education
- Prioritize products and materials and work with relevant industries to establish manufacturer responsibility agreements, including take-back programs, toxicity reduction, labeling and consumer information
- The responsibility for products and by-products that cannot be recycled should shift from being the complete responsibility of citizens and public systems to being shared by manufacturers and businesses
- Establish product stewardship performance guidelines and policies based on assessment of all material streams for feasibility
- Bottle bill for all beverages

REDUCE TOXINS

- Work with industry to reduce the amount of hazardous chemicals in products and manufacturing processes
- Establish measurement system to track both changes in toxins in the waste streams, and hazardous material usage
- Target specific toxins for elimination and set goals
- Require more complete product labeling
- Establish and enforce more stringent approval and use standards for pesticides
- Identify and assess closed and abandoned landfills; prioritize need in state solid waste plan, and clean-up and utilize assets of landfills
- Regulation of recycling that prohibits the recycling of toxic materials in ways that result in environmental exposure, and holds businesses accountable
- Eventually prohibit manufacturing of materials that adversely affect the health of the environment
- Explore opportunities for waste handling of toxins that reduce environmental impacts, including biomedical waste handling practices and standards

REGULATORY ISSUES AND BARRIERS

- Eliminate duplicative and conflicting regulations, regulatory and enforcement programs
- Establish consistency in standards across political boundary lines
- Address definitional issues for recycling and recyclable materials that inhibit recycling
- Simplify permitting and regulatory processes for recycling and disposal
- Ensure that regulatory structure allows flexibility to meet the unique needs of different areas of the state
- Increase county authority over solid waste handling, recycling, and incentive rates
- Explore opportunities to reduce transportation and increase co-collection of waste streams

RESEARCH AND DEVELOPMENT

- Invest public monies in researching improved handling methods and alternatives to toxins and waste in general
- Provide incentives for business investment in research and development on composting, product stewardship, new technologies, and using materials as locally as possible to reduce transportation impacts
- Use grant funds to research and stimulate development of innovative sustainable business practices
- Research and partner with communities that have adopted sustainable approaches and goals for solid waste
- Research and development on separating composite materials in products
- Assess waste-to-energy as a continued and a future option

WASTE DIVERSION AND MATERIALS PROCESSING

- Increase composting of wood residuals, agricultural waste, bio-solids, and other organic components of the waste stream
- Facilities receiving materials should handle them such that a minimal residual remains for land-filling after waste screening and processing
- Promote and provide support, tools and infrastructure for food waste composting at individual and institutional levels
- Ban on products and packaging that cannot be reused, repaired, recycled, or composted
- Disposal bans on organics, commercial paper and cardboard in landfills
- Provide convenient and affordable recycling services to businesses
- Promote local responsibility for waste generated, including evaluation of feasibility for local handling, diversion, and management of all wastes. Require state and local analysis of facilities needed to handle composting and recyclables with distance and tonnage analysis
- Public sector investment in waste diversion facilities
- Require recyclable packaging
- Partner with food processing industry to develop strategies to reduce or beneficially use organic wastes

REGIONAL DISTINCTIONS & NEXT STEPS

REGIONAL DISTINCTIONS IN MILESTONE THEMES

The following list includes the milestone topics that were identified among the most important in only one or two of the regions. These topic headings provide a reminder to statewide planners of the unique needs of communities and the diversity of perspectives across the state concerning solid waste planning for the future. The complete milestone summary statements for each meeting location can be reviewed in the appendices of this document.

Research and Development - Vancouver and Seattle
Waste Diversion - Vancouver and Seattle
Roles and Authorities - Vancouver and Wenatchee
Hazardous Waste Handling - Wenatchee
Waste Handling Facilities - Wenatchee
State and Local Planning - Wenatchee

NEXT STEPS

The recommendations from both the *Issues Identification: Issues for Consideration and Discussion* document and the round table meetings are in no way an exhaustive list of the next steps. The round table meeting series recommendations provide a foundation for the next phase of the state solid waste plan revision. These recommendations, in addition to those raised in the issue papers and by Ecology staff, will be analyzed to identify the issues, milestones, and strategies that will serve the greatest good within the resources available.

State law directs Ecology to coordinate the process and to involve stakeholders in the development of the plan. Ecology will convene an external committee to help develop a supportable state plan. Ecology believes that working in partnership with other stakeholders on mutual interests is the most effective way to create a plan that is supportable and that will be implemented. The vision of a truly coordinated solid waste system, with statewide leadership and responsiveness to unique regional needs, will require such partnerships. In addition to working with the external committee, Ecology is also committed to actively engaging as many interested people as possible in providing input and reviewing plan components and alternatives.

The public will be informed of the final vision, issues to be included in this revision, and the alternatives that will be evaluated as part of the plan revision. These, along with a detailed schedule and process for finalizing the plan, will be made available to all round table participants and interested parties, toward the end of 2001. Please check the project website (www.ecy.wa.gov/programs/swfa/swplan) for information about future opportunities to participate in this revision process.

Milestone topic headings that were among the most important in at least three of the four meeting locations across the state

RESEARCH AND DEVELOPMENT
Vancouver and Seattle

WASTE DIVERSION
Vancouver and Seattle

ROLES AND AUTHORITIES
Vancouver and Wenatchee

HAZARDOUS WASTE HANDLING
Wenatchee

WASTE HANDLING FACILITIES
Wenatchee

STATE AND LOCAL PLANNING
Wenatchee

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APPENDIX A CENTRAL - WENATCHEE

REGIONAL RECOMMENDATIONS AND IDEAS FOR INCLUSION IN THE STATE SOLID WASTE PLAN REVISION

INTRODUCTION

This appendix contains a summary of the outcomes of all four meetings in the Central Region (Wenatchee). This is the information that was used for the development of this statewide round table meeting report. It reflects the work done in Meeting 4 by the regional round table participants in reviewing a draft vision and the milestones to accomplish that vision. In addition, the appendix includes a listing of all the ideas and recommendations developed in Meetings 2 and 3, which have not been altered. The appendix has three sections:

1) Section 1: Regionally Recommended Vision. This section reflects the results of Meeting 4 on creating a regionally recommended vision statement.

2) Section 2: Key Milestone (Goal) Statements. This section includes a summary of common views on key milestone summary statements for the Central Region (Wenatchee) meetings.

3) Section 3: All Milestone Summary Statements, Milestones, and Strategies. This section includes all milestone summary statements, all milestones, and all strategies generated in the Central Region (Wenatchee) meetings.

SECTION 1: REGIONALLY RECOMMENDED VISION

Below is a draft vision for the state solid waste plan that reaches beyond 20 years. The original draft version, published in *Issues Identification: Issues for Consideration and Discussion*, Ecology Publication #01-07-001, was tailored to include feedback from the first three Central Region round table meetings. Participants in Meeting 4 explored support for this regionally tailored vision. The outcome of their work is reflected in the draft vision below. Comments and ideas that came from individuals, not the group as a whole, are noted below the vision.

CENTRAL (WENATCHEE) REGIONALLY RECOMMENDED VISION

A sustainable solid waste system exists for Washington state that engages all residents in balancing the economic, environmental, and social needs of their regions through waste reduction, material reuse, resource and energy conservation, and pollution prevention. Movement toward a sustainable integrated system is seen as a progression over time as the efforts to protect the environment, human health, and to promote economic development merge. A sustainable solid waste system exists that addresses the state's diverse regions and is responsive to urban and rural characteristics of the state.

BUSINESSES' economic survival is fundamental in the process of moving toward sustainability. The region's cultures and historical economic activities are considered important. Businesses increasingly balance material and energy use with practices that reinvest in environmental capital, recognizing that such stewardship is the basis for their long-term survival and profit.

INDIVIDUALS recognize their role in achieving and maintaining sustainability as consumers and environmental stewards. Consumers demand, are provided with, and choose goods and services with the lowest life-cycle impacts on energy and materials use. Financial constraints on individuals to participate in solid waste programs are taken into consideration as part of implementation design.

GOVERNMENT policies provide incentives to businesses and industry to achieve and maintain sustainability. State and local planning is coordinated to assure local needs are addressed and funded. Solid waste regulations and initiatives allow local jurisdictions to set levels for goals and sustainable program development. Roles of the state and local jurisdictions are clear. State and local governments work together to set long term goals and initiatives.

COMMUNITIES create and sustain local systems that support growth within the limits of the environmental carrying capacity. Education, which spans across all solid waste issues, is incorporated in each community. Each community's unique challenges are acknowledged in planning.

ADDITIONAL INDIVIDUAL COMMENTS

Government

- There should be an assurance that 'flexibility' will appear later in the plan - such as, 'local plans provide flexibility for implementation activities.'
- Mandates do not take into account the individuals they affect.

SECTION 2: KEY MILESTONE (GOAL) STATEMENTS

At the final meeting in June, Meeting 4, participants identified common perspectives on key issues. They selected 11 of the most important issue topic headings out of 18. Participants worked together to revise the summary statements most important to them to better reflect the goals they see as critical to the state solid waste plan.

The following are the milestone summary statements for the 11 topic headings selected and revised by participants. Any comments and ideas that came from individual participants and not the group as a whole are noted below the statement. NOTE: of these 11 most important topics, the last one below was not revised by participants due to lack of time in Meeting 4. It is nonetheless included as it was selected by the participants and reflects discussion by participants in Meeting 2.

CENTRAL REGION'S 11 KEY MILESTONE TOPICS AND SUMMARY STATEMENTS

ROLES AND AUTHORITIES (ISSUE PAPER 2)

Within 10 years, all levels of government will work together toward solid waste goals. State and local regulations will be coordinated. Environmental and health regulations will encourage innovation, and solid waste rules and responsibilities will be clear. There will be fewer planning requirements and more implementation.

STATE AND LOCAL SOLID WASTE PLANNING

Within 10 years, state and local solid waste plans will be coordinated and local plans will be funded. Government will acknowledge and respond to the different constraints facing rural and urban Washington.

FUNDING FOR GOVERNMENT SOLID WASTE PROGRAMS

Within 10 years, there will be stable and long term funding sources to implement state and local solid waste plans. Solid waste funding will not be dependent upon waste generation.

ADDRESS SPECIAL WASTE STREAMS (ISSUE PAPER 1)

Within 10 years, special waste streams such as (but not limited to) construction debris, electronic waste, and tires will be diverted from landfills; almost all green waste will be composted; and wrecked cars will be reused.

Additional Individual Comment

- The economics and opportunities for handling such waste needs to be explored.

CHANGING BEHAVIOR AND ATTITUDES

Within 10 years, a noticeable change in behavior and attitudes will be realized through ongoing education on the impacts of solid waste. As a result of heightened awareness, an increasing number of consumers will make purchasing decisions based on sustainability.

Additional Individual Comments

- Add 'litter and illegal dumping will be reduced and recycling will be increased.'
- Measures of success should not be placed on goals of changing behavior and attitudes.

RECYCLING (ISSUE PAPER 11)

Within 10 years, recycling services will be part of the integrated solid waste system. Nearly all materials currently considered waste will be resources or products. Within 30 years, product stewardship will be accepted as a normal manufacturing practice.

LANDFILLS (ISSUE PAPER 9)

Within 10 years, closed landfills will be identified and cleaned up where required, and landfills will become recovery centers. Where feasible, abandoned/closed landfills will be mined to make use of disposed products.

ACTUAL / COMPLETE COSTS OF SOLID WASTE (ISSUE PAPER 10)

Within five years, the state will develop a model to identify the "true costs" of solid waste. Within 10 years, the public will be informed regularly of the "true costs" of solid waste services. Within 20 years, rate structures will be changed to reflect the true costs.

RECYCLING MARKET DEVELOPMENT (ISSUE PAPER 11)

Within five years, all state institutions will buy recycled content products. Within 30 years, stable markets will be developed for recyclables and recycling services will be readily available.

Additional Individual Comment

- Add 'Tax incentives will be in place to support recycling market development.'

INCENTIVES FOR INDUSTRY

Washington state planning is integrated with stable long-term perspectives that provide industry and agencies assurances in planning for the future. The state is proactive with incentives and communicates early with to businesses and agencies, thereby supporting responsive and increasing opportunities to improve solid waste handling.

HAZARDOUS WASTE HANDLING

[Selected but not revised due to lack of time in Meeting 4]

Within 10 years, hazardous waste disposal will be economical and convenient for all citizens. In addition, hazardous waste handling will increase.

SECTION 3: ALL MILESTONE SUMMARY STATEMENTS, MILESTONES, AND STRATEGIES

During Meeting 2, participants drafted milestones, or goals along the way, to a more sustainable approach to solid waste in Washington state for both the long-range vision and the current system needs. The milestones serve as landmarks that help measure progress toward the future solid waste system envisioned. The milestones were then grouped under topic headings by the facilitators and the themes were captured in summary statements.

The following is a compilation of all milestone summary statements (both the top 11 and also the others that did not receive as much emphasis), all individual milestones, and all strategies generated in the Central Region (Wenatchee) meetings. It is a compilation of the meeting summaries from Meetings 2, 3, and 4.

The milestones are grouped by topic. If the topic is related to an Issue Paper from *Issues Identification: Issues for Consideration and Discussion*, Ecology Publication #01-07-001 the source is noted. The milestone summary statements at the beginning of each topic group are the same ones used in the above section. These summary statements are followed by all of the individual milestone ideas raised.

In Meeting 3, participants identified specific actions or strategies they think would best accomplish the milestones identified in Meeting 2. The strategies have been merged beneath the milestone topic heading under which they were posted.

As a guide for the reader, each milestone includes in parentheses the initial of the breakout group in which it was created it and the year it was placed on the timeline. The initials for the sector breakout groups stand for the following:

(B) = Business
(C) = Community & Civic Groups
(E) = Environment
(G) = Government
(SW) = Solid Waste Industry

NOTE: These sector groups are not intended to be representative of the sectors themselves, but merely provided an opportunity for people to propose ideas from various perspectives.

CENTRAL REGION'S MILESTONES & STRATEGIES

11 KEY MILESTONE TOPICS

ROLES AND AUTHORITIES (ISSUE PAPER 2)

Within 10 years, all levels of government will work together toward solid waste goals. State and local regulations will be coordinated. Environmental and health regulations will encourage innovation, and solid waste rules and responsibilities will be clear. There will be less planning requirements and more implementation.

MILESTONES

- Environmental and health regulations work toward creative solutions rather than discouraging innovation (SW) 2001
- Easier landfill expansion and processes, state and local (SW) 2001
- Government foresees eventual and imminent environmental degradations, alerts Ecology on all federal/state controls, and has sufficient lead time to avoid civil disobedience (B) 2003
- Know amounts of waste generated locally (G) 2003
- Local plans recognized by the state (G) 2003
- Level playing field. If government wants to collect and have services, let them buy truck tonnage, heavy highway use tax, business and occupation taxes, etc. (SW) 2003
- Exemptions and/or funds for recycling coordinators, etc. are available to the people that actually get the job done - not just talk about it (SW) 2003
- Federal, state, county, city and private are all "on the same side" (SW) 2006
- Coordinate state and local regulations (G) 2006
- Regulations (solid waste and air quality) prioritized and coordinated (G) 2006
- Rules require an enforcement component - identify who it is and make it happen (political sensitivities, etc.) (SW) 2006
- Governments work together toward solid waste goals (E) 2011
- Regulations, not just solid waste, are clear and public can economically comply (G) 2011
- Clear rules and responsibility with regard to who has enforcement authority (G) 2011
- No changes in regulations (G) 2011
- Less planning requirements. More program (hazardous waste and recycle) implementation (G) 2011

STRATEGIES

Regulatory Action

- Statewide recognition that one size does not fit all and that urbanized approaches, programs, and strategies are not always implementable within rural areas (G)
- State plan should be signed off by the state legislature and included in the governor's budget (G)
- Remove, change, and clarify enforcement agencies that duplicate solid waste enforcement (G)
- Develop a strategy to reduce government role in regulatory matters based upon a hierarchy of risks to humans and environment (G)
- Regulations that do not hinder ways to maintain local authority, i.e., special districts (G)

STATE AND LOCAL SOLID WASTE PLANNING

Within 10 years, state and local solid waste plans will be coordinated and local plans will be funded. Government acknowledges and responds to the different constraints facing rural and urban Washington.

MILESTONES

- Stable/reliable funding source to maintain programs (G) 2001
- Fund local plans today (G) 2001
- State plan should be reflective of local plans primarily (G) 2001
- Set realistic state goals with step-by-step guidelines on how to achieve those goals (G) 2000
- Production of state plan is timely with implementation of local plans (G) 2001
- Government understands that rural eastern Washington operates under different constraints than western Washington (SW) 2001
- Population impacts are considered in planning (E) 2003
- Solid waste planning fully funded (G) 2003
- Provide stable and long term funding for state and local plans (G) 2006
- State voter pamphlet says less than two percent of budget goes to natural resource agencies (E) 2006

STRATEGIES

Comments and Concerns

- Locally adopted solid waste plans should be utilized as the cornerstone of the state plan (G)
- Planning will concurrently address long-term needs while maintaining the means to be flexible and responsive to changes in scientific knowledge, funding, and political will (G)
- Local plans need flexibility for funding and concurrence with state plan (G)
- State plan needs to be general enough for each local plan to have ability to develop and tailor local needs (G)

FUNDING FOR GOVERNMENT SOLID WASTE PROGRAMS

Within 10 years, there will be stable and long term funding sources to implement state and local solid waste plans. Solid waste funding will not be dependent upon waste generation.

MILESTONES

- Stable and long term funding source to implement state and local plans (G) 2003
- Solid waste program funding not dependent upon waste generation - Identify Options (G) 2003
- Stable funding source for program maintenance (G) 2006
- Solid waste program funding not dependent up on waste generation - chosen Options from 2003 are implemented (G) 2006
- Convenient and economically feasible options exist (G) 2021
- End CPG funding by Ecology (G) 2021
- Funding provided to assist with zero percent toxic disposal (G) 2031
- Replace infrastructure every 30 years (G) 2031

STRATEGIES

Funding for Government Programs

- Reestablish the Solid Waste Management Account (G)
- Develop strategy to reduce state funding of solid waste (G)
- Funding for solid waste programs - establish independent and dedicated state account to be directly allocated to local governments (G)

Regulatory Action

- Allow flexible paths for local jurisdictions to accomplish local goals (G)

ADDRESS SPECIAL WASTE STREAMS (ISSUE PAPER 1)

Within 10 years, special waste streams such as (but not limited to) construction debris, electronic waste, and tires will be diverted from landfills; almost all green waste will be composted, and wrecked cars will be reused.

MILESTONES

- Reduce wrecked vehicles to reusable components within 12 months except when auto bodies are certified restorable (B) 2001
- 99.9 percent of green waste composted (G) 2003
- Construction debris diverted from landfills (G) 2003
- Compost yard waste collected from residents (G) 2003
- Remove green waste from the waste stream going to landfill and compost (G) 2003
- Remove construction debris from the waste stream that goes to sanitary landfill (G) 2003
- System for electronic waste recycling (G) 2003
- Green waste out of landfills (G) 2006
- Tires out of landfills (G) 2006
- Compost agricultural waste rather than burning (G) 2006
- Isolate existing "wrecking yard" car bodies (and contents) from air polluting and ground seepage storage conditions (B) 2006
- Manufacturers of high carbon products develop subsidiary, partner biomass business (B) 2006
- Research and development in nuclear industry finds a way to fast-decay nuclear waste, e.g., heat energy use (B) 2011

STRATEGIES

Regulatory Action

- Ban tire disposal in municipal solid waste landfills and ban long-term storage of tires to under one year (G)

Financial Incentives and Disincentives

- Fee on tires to encourage refund for all tires returned to retailer (G)

Partnerships

- Partner with food processing industry to develop strategies to reduce or beneficially use organic wastes (B)

Materials Processing and Management

- Identify statewide strategy for tires so they do not just move around the state as a local problem (G)

CHANGING BEHAVIOR AND ATTITUDES

Within 10 years, a noticeable change in behavior and attitudes will be realized through on-going education on the impacts of solid waste. As a result of heightened awareness, an increasing number of consumers will make purchasing decisions based on sustainability.

MILESTONES

- Citizens educated on impacts of solid waste AND they care (E) 2003
- Require recycling reporting (G) 2003
- Consumers realize that waste is either purchased, grown, or you allow someone to deliver it to you (SW) 2006
- People recognize they use too much 'affluenza'(E) 2006
- 75 percent of Washington consumers make purchasing decisions based on sustainability (G) 2011
- Ranchers/farmers are fully educated land stewards (E) 2011
- Earth is still alive - we can celebrate 50th Earth Day (E) 2021

STRATEGIES

Materials Processing and Management

- Communities with the potential to have landfills should be encouraged to handle their own waste stream and not ship off to other regions(G)

Education

- Present the educational component as a high priority to achieve sustainability (G)
- Fund education in schools and to the public in general to change behavior (G)

RECYCLING (ISSUE PAPER 11)

Within 10 years, recycling services will be part of the integrated solid waste system. Nearly all materials currently considered waste will be resources or products. Within 30 years, product stewardship will be accepted as a normal manufacturing practice.

MILESTONES

- Recycle centers are close to communities and are always price attractive (G) 2001
- Transfer stations have better recovery of materials (SW) 2006
- Curbside recycling available for 75 percent of residents (G) 2006
- Maintain/sustain current recycle and hazardous waste programs (G) 2006
- 80 percent of materials considered waste in 2001 are resources or products (G) 2011
- 100 percent of materials considered waste in 2001 are resources/ products (G) 2021
- Product stewardship is accepted as a normal manufacturing practice (G) 2021
- Super material recovery facility; market exists for all waste (SW) 2021
- Perfect recycling, little disposal, less than 1lb. per person of waste per day (SW) 2031
- Business locally - i.e., domestic - in state will be compliant and in an exemplary lead role with global recycling standard (consider the effectiveness even recently of the Kyoto Treaty) (B) 2041
- Garbage to energy (G) 2051

STRATEGIES

New Data and Measurement Tools

- Provide local comprehensive waste generation studies and keep current (G)

Full Cost Accounting

- Identify and take out hidden costs in recycling (G)

Partnerships

- Use Ecology and solid waste coordinator meetings to identify solid waste reduction/diversion or recycling opportunities, jointly develop implementation strategies, and do it (G)

LANDFILLS (ISSUE PAPER 9)

Within 10 years, closed landfills will be identified and cleaned up where required, and landfills will become recovery centers. Where feasible, abandoned/closed landfills will be mined to make use of disposed products.

MILESTONES

- 100 percent of closed landfills have been identified and assessed (G) 2003
- 90 percent of closed/abandoned landfills have been cleaned up where required (G) 2006
- Community clean up of abandoned waste sites where possible (G) 2011
- 100 percent of closed abandoned landfills have been cleaned up (G) 2011
- Landfills become recovery centers (SW) 2016
- Mine abandoned/closed landfills and make use of products that were disposed of (G) 2031
- 90 percent of closed/abandoned landfills identified and assessed (G) 2031

STRATEGIES

Materials Processing and Management

- Landfills can be designed for future mining of materials (G)

ACTUAL / COMPLETE COSTS OF SOLID WASTE (ISSUE PAPER 10)

Within 5 years, the state will develop a model to identify the "true cost" of solid waste. Within 10 years, the public will be informed regularly of the "true cost" of solid waste services. Within 20 years, rate structures will be changed to reflect the true costs.

MILESTONES

- Waste bills include money and environmental impacts on decisions regarding solid waste services (E) 2003
- The cost of waste is identified by community (G) 2006
- Alter funding of facility operations to include stable sources to go with tipping fees (not solely dependent on tipping fees (G) 2006

- Penalties for not recycling - unit based pricing (G) 2006
- Market reality - a platform exists for all costs (SW) 2016

STRATEGIES

New Data and Measurement Tools

- Utilize a life cycle assessment model that is standardized and used uniformly (G)

Incentives and Disincentives

- Incentives-based NOT penalties-based (G)

Regulatory Action

- Regulations are only passed in legislation with funding identified (G)

RECYCLING MARKET DEVELOPMENT (ISSUE PAPER 11)

Within 5 years, all state institutions will buy recycled content products. Within 30 years, stable markets will be developed for recyclables and recycling services will be readily available.

MILESTONES

- Stable markets for recyclables and somewhere to take them (G) 2001
- There are not enough markets for materials (E) 2011
- If you produce it you have to provide a market to purchase what remains at the end of the product life (G) 2021
- DNA in everything generated to be able to track back to source (G) 2021
- Markets exist for all waste (SW) 2026
- Free market economics rule in solid waste industry. Government intervention is zero (G) 2031

INCENTIVES FOR INDUSTRY

Washington state planning is integrated with stable long-term perspectives that provide industry and agencies assurances in planning for the future. The state is proactive with incentives and communicates early with to businesses and agencies, thereby supporting and increasing opportunities to improve solid waste handling.

MILESTONES

- Businesses producing carbon-rich commodities incorporate carbon-crediting into the price of goods (B) 2006
- All buyers get x shares of recycling stock (e.g., four percent of products sale price for turn over of materials into recycle market, car into car) (B) 2006

HAZARDOUS WASTE HANDLING

[Selected but not revised due to lack of time in Meeting 4]

Within 10 years, hazardous waste disposal will be economical and convenient for all citizens. In addition, hazardous waste handling will increase.

MILESTONES

- Hazardous waste handling increases (SW) 2006
- Hazardous waste disposal economical and convenient for all citizens (G) 2011

STRATEGY

Comment and Concern

- Need strategies for long term impact (G)

MILESTONE TOPICS NOT INCLUDED IN THE KEY 11

LITTER AND ILLEGAL DUMPING (ISSUE PAPER 3)

Within 10 years, both public and natural areas will not be littered. This will occur through litter abatement programs and litter education.

MILESTONES

- Focus on litter education (SW) 2001
- Keep current litter abatement program (G) 2001
- Enforcement and penalties for not using landfills or improper disposal (G) 2001
- Parks and natural areas are not littered or dumped (E) 2006
- Increase litter enforcement and funding (G) 2011
- No disposable products in public areas (C) 2016

STRATEGIES

Education

- Increase education and enforcement (G)
- Increase education and enforcement with the same funds for existing for litter control (E)

Partnerships

- Develop Community Litter Cleanup Program/ DOT/ DOC/ Ecology, health departments, and agencies partnerships to clean up illegal dumps, educate public on cost of dumping, and enforce against dumpers (G)

Regulatory Action

- Require waste disposal accounts per business and residence (G)

RECYCLABLE PRODUCTS (ISSUE PAPER 11)

Within 10 years, nearly all products will be recyclable and all packaging will be recyclable or reusable. Within 30 years, all products will be recyclable. Within 60 years, all products will be reusable or biodegradable.

MILESTONES

- Packaging 100 percent recyclable/reusable (E) 2011
- All manufactured commodities (non-export) 90 percent recyclable (B) 2011
- All manufactured commodities (export) 100 percent recyclable (B) 2011
- Products must be totally recyclable - e.g., nuclear (B) 2021
- All products are reusable/biodegradable (G) 2061

RECYCLING SERVICES (ISSUE PAPER 11)

Within 10 years, educational programs will utilize partnerships within the community to learn about, engage in, and support services that reflect the importance of recycling and accomplish it. Within 20 years, there will be 50 percent rural curbside recycling collection. Within 60 years, there will be 100 percent rural curbside recycling collection.

MILESTONES

- Develop education program as partnerships where everyone wins, lessons are learned, buy-in is developed and a successful sustainable program operates efficiently (SW) 2001
- People know and understand the importance of recycling and do it! (C) 2011
- Achieve a non-separated collection system (SW) 2016
- Rural recycling collection increases to 50 percent with curb side recycle service (C) 2021
- Rural curbside recycling 100 percent (C) 2041

WASTE GENERATION REDUCTION (ISSUE PAPER 6)

Within 10 years, communities will take responsibility for the waste they generate. Consequently, there will be a 20 percent to 25 percent per capita decrease in waste generation.

MILESTONES

- Community takes responsibility for the waste they generate (SW) 2003
- Waste generation goes down by 25 percent (G) 2006
- Waste generation does not go down or up (G) 2006
- Waste generation per capita decreases by 20 percent (G) 2011

STRATEGY

Education

- Starts with product stewardship and education (G)

WASTE DIVERSION (ISSUE PAPER 5)

Within 10 years, waste will go down by 25 percent and within 15 years, 50 percent of waste will be diverted.

MILESTONES

- Waste disposal goes down by 25 percent (G) 2006
- 50 percent waste diversion rate (G) 2016

STRATEGY

New Data and Measurement Tools

- Conduct a statewide waste characterization study (G)

TOXINS REDUCTION

Within 10 years, there will be a 50 percent reduction in toxics generated. In addition, there will be education regarding proper disposal of domestic hazardous waste e.g., home health care waste.

MILESTONES

- Provide funding for proper disposal and education regarding of home health care waste, which possesses more hazards in waste handling (some items not labeled in English) (SW) 2003
- 50 percent reduction in toxins/ HHW waste generated (G) 2011
- Solid waste contributions to toxic body loading reduced (humans and animals, and soil and plants) (E) 2011

STRATEGY

Comment and Concern

- Need strategies for long term impact (G)

DISPOSAL FACILITIES

Within 10 years, there will be a new approach to disposal facilities. Landfill operations will be converted to waste-to-energy operations and new ways to use waste will be explored, e.g., grind/bio reactors and gas compost.

MILESTONES

- Look at ways to use waste - even landfills - grind/bio reactor - use gas compost (SW) 2006
- Landfill operations are converted to waste-to-energy operation (B) 2011

APPENDIX B EAST - SPOKANE

REGIONAL RECOMMENDATIONS AND IDEAS FOR INCLUSION IN THE STATE SOLID WASTE PLAN REVISION

INTRODUCTION

This appendix contains a summary of the outcomes of all four meetings in the East Region (Spokane). This is the information that was used for the development of this statewide round table meeting report. It reflects the work done in Meeting 4 by the regional round table participants in reviewing a draft vision and the milestones to accomplish that vision. In addition, the appendix includes a listing of all the ideas and recommendations developed in Meetings 2 and 3, which have not been altered. The appendix has three sections:

1) Section 1: Regionally Recommended Vision. This section reflects the results of Meeting 4 on creating a regionally recommended vision statement.

2) Section 2: Key Milestone (Goal) Statements. This section includes a summary of common perspectives on key milestone summary statements for the East Region (Spokane) meetings.

3) Section 3: All Milestone Summary Statements, Milestones, and Strategies: This section includes all milestone summary statements, all milestones, and all strategies generated in the East Region (Spokane) meetings.

SECTION 1: REGIONALLY RECOMMENDED VISION

Below is a draft vision for the state solid waste plan that reaches beyond 20 years. The original draft version, published in *Issues Identification: Issues for Consideration and Discussion*, Ecology Publication #01-07-001, was tailored to include feedback from the first three East Region round table meetings. Participants in Meeting 4 explored support for this regionally tailored vision. The outcome of their work is reflected in the draft vision below. Comments and ideas that came from individuals, not the group as a whole, are noted below the vision.

EAST (SPOKANE) REGIONALLY RECOMMENDED VISION

A sustainable economic system exists, reflecting the state's regionally unique characteristics, and is based on waste reduction, material reuse, resource and energy conservation, and pollution prevention. The system for solid waste in Washington State engages all residents in meeting the needs of the present without compromising the ability of future generations to meet their own needs. This is done by balancing the economic, environmental, and social needs of the regions. Existing resources are maximized to support a sustainable approach to protecting the environment, human health, and promoting economic development.

BUSINESSES balance material and energy use with practices that reinvest in environmental capital, recognizing that such stewardship is the basis for their survival and presents opportunities for increased profit. Manufacturers share responsibility for their product and packaging wastes. Product stewardship is addressed in a realistic manner, given the unique challenges for rural communities. Material reuse and recycling infrastructures have been developed and stable financial support for the costs of transportation exist.

INDIVIDUALS recognize their role in achieving and maintaining sustainability as inhabitants and consumers. Consumers demand, are provided with, and choose goods and services with the lowest life-cycle impacts on energy and materials use. The costs of these choices are equitable to all individuals.

GOVERNMENT economic development policies provide incentives to businesses and industry to achieve and maintain sustainability. State and local solid waste planning is coordinated, addresses local needs, and mandates have sufficient state funding. Local jurisdictions are empowered with the flexibility to address the unique conditions of their region in the process of implementing the state plan. State and local government work cooperatively to find workable funding mechanisms.

COMMUNITIES advocate for economic, environmental, and social equity in solid waste planning and implementation. Local systems are sustained that support development within the limits of the environmental carrying capacity of the region.

ADDITIONAL INDIVIDUAL COMMENTS

Opening Paragraph
- Add in 'cost effective'

Government
- Consider the distinct concepts of current system needs and long range in all aspects of vision statement.
- Stating that 'local jurisdictions are empowered with the flexibility...' could give permission to drop what is mandated at state/ federal level, which should not be the result of 'flexibility.'
- A short term transition period is needed to get to the place where mandates can be sustained in the long term.

Communities
- Who defines the 'environmental carrying capacity?'
- Who defines a region, how is it defined?
- Regarding equity, who does this apply to?

SECTION 2: KEY MILESTONE (GOAL) STATEMENTS

At the final meeting in June, Meeting 4, participants identified common perspectives on key issues. They selected 11 of the most important issue topic headings out of 16. Participants worked together to revise the summary statements most important to them to better reflect the goals they see as critical to the state solid waste plan.

The following are the milestone summary statements for the 11 topic headings selected and revised by participants. Any comments and ideas that came from individual participants and not the group as a whole are noted below the statement. NOTE: of these 11 most important topics, the last one below was not revised by participants due to lack of time in Meeting 4. It is nonetheless included as it was selected by the participants and reflects discussion by participants in Meeting 2.

EAST REGION'S 11 KEY MILESTONE TOPICS AND SUMMARY STATEMENTS

CHANGING BEHAVIORS AND ATTITUDES

Within the next 10 years, consistent educational programs and advertising strategies will inform the general public, school age to adult, of the social, economic, and environmental value of recycling, and making less waste. Consumers base purchasing decisions on the environmental impact of the product. Consumers and public officials will understand how waste management issues are related to growth and consumer habits.

RECYCLING (ISSUE PAPER 11)

Government agency involvement in recycling will increase and utilize proper methods before enforcement of recycling. Within 10 years, recycling services will be available to 90 percent of citizens of the state, and drop-off centers will be available within reasonable distances in all rural areas. This will increase to 100 percent in 30 years. Manufacturing industries will participate in recycling through labeling that indicates recycling content and environmental impacts. Within 10 years, state agency policy will require employees to utilize practices that reduce, reuse, and recycle all possible materials in the office, and in five years, purchasing guidelines will be set for use of maximum recycled content. In 30 years, we will see 75 percent of all solid waste materials reused or recycled into a useful product via some collection and recovery system.

RECYCLING MARKET DEVELOPMENT (ISSUE PAPER 11)

Market development efforts will create and assist businesses that will utilize currently collected and additional potentially viable materials for reuse and recycling. Targeted materials will be identified. The immediate focus will be on identifying materials for reuse with a priority focus based on environmental impacts, cost effectiveness, and what is currently being collected. A secondary focus will be on development of markets. An increase of the 2001 percentage of local materials reused locally will be realized in three to five years.

ACTUAL / COMPLETE COSTS OF SOLID WASTE (ISSUE PAPER 10)

Immediate educational programs will be developed targeting consumers and citizens on cultural values for product quality and environmental costs of solid waste. Within three years, businesses, consumers, and government agencies will be educated on true cost and life cycle assessment tools, and a significant number will adopt them for use. Within three years to 20 years, industry targeted incentives will be developed and in place that reflect true costs and environmental impacts with mandates used at a later time.

LANDFILLING AND INCINERATION (ISSUE PAPER 9)

Within the next 10 years, 100 percent of landfills will be assessed, closed if required by regulations, and clean up will begin. Certain materials will be banned from landfills and incineration. And at least 50 percent of landfills will be 'mined' for reuse of materials in 40 years.

FUNDING FOR GOVERNMENT SOLID WASTE PROGRAMS (ISSUE PAPER 4)

From here out, costs will be shifted to those who generate waste so future generations are not burdened by the past. Flow control opportunities will be explored to increase funding security. Taxation will be explored as an alternative to tipping fees.

ELIMINATION OF WASTE (ISSUE PAPER 5)

Within one year, a representative panel in the East region will be formed to explore opportunities and challenges to achieving zero waste and are mandated to create a plan within three years. Within five years, producers and consumers will be educated on how waste can become a resource and the effects of materials on human health, the environment, and economic viability. Per capita waste will be reduced by five percent per year.

PRODUCT STEWARDSHIP (ISSUE PAPER 7)

Within the next 10 years, reused / recycled materials will increasingly provide the needed resources for manufacturers' products. At least 50 percent of businesses will use closed loop production and other product stewardship practices for at least 50 percent of their products. Within the next 60 years, re-used/ recycled materials will provide at least 50 percent of resources for manufacturers' products.

REDUCTION OF TOXINS IN MANUFACTURED GOODS

Within in the next 15 years, toxins in products and waste will be reduced by 50 percent. And in the next 30 years incentives will promote manufacturers to use recycled or high-recycled content raw materials, and will eliminate toxins in their product designs.

WASTE PREVENTION (ISSUE PAPER 6)

Within the next 10 years, waste prevention policies and manufacturing practices will exist that maximize product life and promote the reutilization of a variety of materials, including construction and manufacturing.

CONSUMER AND INDUSTRY INCENTIVES

[Selected but not revised due to lack of time in Meeting 4]

Within the next 10 years, financial incentives will exist that target both consumers and industry that participate in recycling, conservation, and pollution reduction efforts. In addition, subsidies for virgin material extraction will be eliminated.

SECTION 3: ALL MILESTONE SUMMARY STATEMENTS, MILESTONES, AND STRATEGIES

During Meeting 2, participants drafted milestones, or goals along the way, to a more sustainable approach to solid waste in Washington state for both the long-range vision and the current system needs. The milestones serve as landmarks that help measure progress toward the future solid waste system envisioned. The milestones were then grouped under topic headings by the facilitators and the themes were captured in summary statements.

The following is a compilation of all milestone summary statements (both the top 11 and also the others that did not receive as much emphasis), all individual milestones, and all strategies generated in the East Region (Spokane) meetings. It is a compilation of the meeting summaries from Meetings 2, 3, and 4.

The milestones are grouped by topic. If the topic is related to an Issue Paper from *Identification: Issues for Consideration and Discussion*, Ecology Publication #01-07-001 the source is noted. The milestone summary statements at the beginning of each topic group the same ones used in the above section. These summary statements are followed by all of the individual milestone ideas raised.

In Meeting 3, participants identified specific actions or strategies they think would best accomplish the milestones identified in Meeting 2. The strategies have been merged beneath the milestone topic heading under which they were posted.

As a guide for the reader, each milestone includes in parentheses the initial of the breakout group in which it was created it and the year it was placed on the timeline. The initials for the sector breakout groups stand for the following:

(B) = Business
(C) = Community & Civic Groups
(E) = Environment
(G) = Government
(SW) = Solid Waste Industry

NOTE: These sector groups are not intended to be representative of the sectors themselves, but merely provided an opportunity for people to propose ideas from various perspectives.

EAST REGION'S MILESTONES & STRATEGIES

11 KEY MILESTONE TOPICS

CHANGING BEHAVIORS AND ATTITUDES

Within the next 10 years, consistent educational programs and advertising strategies will inform the general public, school age to adult, of the social, economic, and environmental value of recycling, and making less waste. Consumers base purchasing decisions on the environmental impact of the product. Consumers and public officials will understand how waste management issues are related to growth and consumer habits.

MILESTONES

- Educational outreach focused at achieving 100 percent of Washington consumers making purchasing decisions primarily based on product or manufacturer sustainable performance measures (SW) 2001
- Institute school age and adult education programs (G) 2001
- All decisions based on individual wellness (E) 2001
- There is a constant advertising and education to the general public on the social, economic, and environmental value of recycling and making less waste (E) 2003
- Educate voters/recyclers. Need to form lobby (G) 2006
- Environmental education should become a class as familiar as math or English at all grade levels (E) 2006
- Change public perceptions on value of waste management (G) 2006
- 50 percent of Washington consumers make purchasing decisions based on guidelines provided by Washington State Consumer Guide to Sustainable Performance Measures (E) 2006
- Public officials have mentality that growth isn't good. Growth equals more people, business and waste in any community. Money shouldn't matter (E) 2006
- Change target of plan/regulations from industry to consumers (E) 2011
- Every high school senior takes one-year mandatory environmental science course (in Washington state) (E) 2011
- 75 percent of Washington consumers make purchase decisions based on sustainable performance measures (E) 2021
- We need to move to a state of education where people don't consume material goods and value simplicity and individual wellness above making money, consumption and living while making waste. Down with the American way (E) 2021
- Consumption, purchasing material goods, and making waste is a socially unacceptable behavior, similar to smoking now (E) 2041

STRATEGIES

Financial Incentives and Disincentives

- Change attitudes - increase recycling and reduce waste is contradictory. Remove false subsidies for recycling. Garbage and recycling cost more than waste prevention (SW)

Materials Processing and Management

- Database of reusable recycled content materials available in community (G)

Procurement

- Schools and other public facilities should use only organic / non- toxic products for cleaning, landscaping, and fertilization and pest control, etc. thereby demonstrating to employees, students, and the public how non-toxic alternatives are functional, preferable, and affordable (E)

Regulatory Action

- Education is the MOST important! Ecology staff should teach more classes open to the public. Schools should have environmental clubs and mandated recycling programs. Community events must be used as means to educate the public about the impacts of solid and hazardous waste (CC)

Resource Conservation

- Our solid waste plan shall encourage the sharing of as many goods a possible. Bicycles, radios, vacuums, washing machines, clothing, automobiles and many other items can decrease in volume as they are shared between community members (E)

Education

- Teach backyard composting to every citizen of the state (CC)
- Education outreach programs targeted to elementary school, several grade levels, with take home materials (G)
- Ecology will work with major universities in the state to develop and teach classes to all architect and engineering majors on sustainable building practices (CC)
- General population must emotionally and actively buy into the process. How? Wish I could do this. Education at all levels (SW)
- Work with private organizations to educate citizens so that there is a one to one education process (E)
- Local school districts allow and invite industry representation into classrooms to educate how environmental issues effect industry and therefore effect local economy, environment and citizens (E)

RECYCLING (ISSUE PAPER 11)

Government agency involvement in recycling will increase and utilize proper methods before enforcement of recycling. Within 10 years, recycling services will be available to 90 percent of citizens of the state, and drop-off centers will be available within reasonable distances in all rural areas. This will increase to 100 percent in 30 years. Manufacturing industries will participate in recycling through labeling that indicates recycling content and environmental impacts. Within 10 years, state agency policy will require employees to utilize practices that reduce, reuse, and recycle all possible materials in the office, and in five years, purchasing guidelines will be set for use of maximum recycled content. In 30 years, we will see 75 percent of all solid waste materials reused or recycled into a useful product via some collection and recovery system.

MILESTONES

- Government agencies engage in and implement proper recycling practices across agencies. Before government enforces recycling they need to learn how to recycle properly themselves. (SW) 2001
- Recycling services available in 100 percent of the state (E) 2003
- Cash incentive for recycling and energy recovery (G) 2003
- Recycling services available in 100 percent (Does NOT mean curbside in rural areas - drop off, etc., in reasonable distance) (G) 2006
- Recycling services are readily available in 90 percent of the state (E) 2006
- Start-up recycling businesses get tax breaks for first years of operation (E) 2006
- Require brand owners to include labels on products that show recycling content and key environmental impacts (E) 2006
- Government employees and large businesses need to mandate employee recycling of all materials to reach zero waste AT WORK (E) 2006
- Realistic about how do we truly determine the percentage of recycling content - i.e., we don't make aircraft quality aluminum from pop cans or surgical steal from toasters! Need real markets with proper utilization of them (SW) 2006
- Every state, county, and city employee is required to reduce, reuse, and recycle all materials in the office, with the goal of creating zero waste. 100 percent of state purchased materials are the maximum recycled content, regardless of initial cost (E) 2011
- 100 percent of materials considered waste in 2001 are considered to be resources or products (E) 2011
- Recycling available in 100 percent of state (G) 2021
- 75 percent of all solid waste materials are reused or recycled into a useful product via some collection and recovery system (easily accessed) (E) 2021
- 100 percent of manufacturers use disassembly, ease of recycling and toxin reduction and recycled content product design criteria (E) 2021

STRATEGIES

Procurement

- Implement procurement policies at all levels of government, including school districts, etc. (G)

Funding for Government Programs

- Continued secured state funding stop taking from the UTC for other programs, i.e., meth lab clean ups (G)
- State funding should allow replacing capital purchases from previous grants (G)

Taxes

- Tax landfills to support recycling and energy recovery (G)

Regulatory Action

- All government buildings over 100 employees will be required to implement some type of food waste recycling programs (CC)
- Ban on products and packaging that cannot be reused, repaired, recycled, or composted (E)
- Regulation of recycling that prohibits the recycling of toxic materials in ways that result in environmental exposure such as is currently being done with incinerator ash (E)
- Eventually prohibit manufacturing of materials that adversely affect the health of the environment (E)

New Data and Measurement Tools

- A new waste characterization study should be conducted by Ecology to determine fully what wastes exist and what options for reuse exist, not just for municipal solid waste, but ALL wastes (CC)

Education

- Educate. People do not recycle properly making recyclable products garbage (SW)

Financial Incentives and Disincentives

- Take monies away from government agencies when they do not recycle (SW)
- Government taxation of businesses and manufacturers who do not comply with packaging recycling criteria (E)

RECYCLING MARKET DEVELOPMENT (ISSUE PAPER 11)

Market development efforts will create and assist businesses that will utilize currently collected and additional potentially viable materials for reuse and recycling. Targeted materials will be identified. The immediate focus will be on identifying materials for reuse with a priority focus based on environmental impacts, cost effectiveness, and what is currently being collected. A secondary focus will be on development of markets. An increase of the 2001 percentage of local materials reused locally will be realized in three to five years.

MILESTONES

- Development of markets for long-term use of recycled materials (SW) 2001
- Have the means to ship recyclables at a reasonable rate of return. Real markets exist (SW) 2003
- Invest in resource conservation and recycling and re-use based businesses, expand market development efforts, especially community-based recycling economic development policies and strategies (E) 2006
- Find more markets for waste (G) 2006
- Acquire public property for re-use, recycling, and composting in order to provide a stable land base for eco-industrial parks and re-use and recycling facilities (E) 2006
- Support recycling-based economic development through grants, low-interest loans, loan guarantee programs, tax credits, technical assistants, research and development (E) 2006

STRATEGIES

Incentives and Disincentives

- Change in state law to allow tax incentives, etc. for recycle reuse business (G)
- Incentives to lure markets to a more local level to reduce transportation costs (G)

Market Development by Government

- Put as much effort into developing markets as has been placed on other market building by the government (G)

Procurement Standards

- All state and local government will adopt permanent standards such as federal government executive order in Clinton administration requiring high levels of recycled content and material purchases - buy recycled (CC)

Comments and Concerns

- This would represent a complete paradigm shift in recycling from the current ineffective token effort and weak over-saturated market to a strong, meaningful one (E)

ACTUAL / COMPLETE COSTS OF SOLID WASTE (ISSUE PAPER 10)

Immediate educational programs will be developed targeting consumers and citizens on cultural values for product quality and environmental costs of solid waste. Within three years, businesses, consumers, and government agencies will be educated on true cost and life cycle assessment tools, and a significant number will adopt them for use. Within three years to 20 years, industry targeted incentives will be developed and in place that reflect true costs and environmental impacts with mandates used at a later time.

MILESTONES

- Cost of waste disposal of products included in price (E) 2003
- Incineration programs already exist, but do not work. An program incentive that utilizes costs of waste disposal internalized into product costs or use of true cost accounting and/or life cycle assessments adopted by business and public agencies (SW) 2003
- Reduce planned obsolescence through use of true cost accounting and/or life cycle assessments by business and public agencies (SW) 2006
- Disposal cost included in price of product (G) 2006 & 2021
- 100 percent of business and public agencies adopt true cost and life cycle assessment into practices (E) 2011

STRATEGIES

Full Cost Accounting

- Redefine true cost of solid waste decisions, get additional representatives from solid waste industry and private business (SW)
- Do an assessment on the true costs of disposal and recycling programs as they now exist, then what may be achieved with some change and at what costs (SW)

Taxes

- Legislation to tax products based on waste disposal costs tax passed to consumers so disposal cost is in product (G)

Producer Responsibility

- Business / government responsibility for upstream and downstream costs of manufacturing - citizenry should no longer bear the burden financially of waste disposal in regard to environment, health, and welfare, particularly as related to incineration (E)

Materials Processing and Management

- Solid waste disposal facilities public or private must have tipping fee cover all costs of the solid and hazardous waste program costs. This will show the public the true costs of disposal versus recycling (CC)

Consumer Demand

- Consumer incentives need to be implemented that provide financial motivation for purchasing products which are not damaging to the environment or depleting of resources (E)

Comments and Concerns

- Actual/complete costs of solid waste differ from jurisdiction to jurisdiction, public and private and not productive to do. Many ways to account for lifecycle costs (G)
- Identify critical 'must do' things to get done, i.e., eliminate all glass or use only clear glass for example, if glass goals are not reached is public willing to subsidize costs for 'the greater good of all' (G)

LANDFILLING AND INCINERATION (ISSUE PAPER 9)

Within the next 10 years, 100 percent of landfills will be assessed, closed if required by regulations, and clean up will begin. Certain materials will be banned from landfills and incineration. And, at least 50 percent of landfills will be 'mined' for reuse of materials in 40 years.

MILESTONES

- Private landfills need to be stopped (SW) 2001
- Follow through and close landfills that do not meet regulations (G) 2001

- Energy generation has priority over land filling (G) 2003
- Composting/landfill requirements flexible to account for variety of environment (E) 2003
- Enforce current landfill regulations evenly (G) 2003
- Ban recyclable and reusable materials and products from landfills and incinerators (E) 2006
- 100 percent of closed/abandon landfills have been identified and assessed (E) 2006
- 100 percent of landfills (abandoned/closed) with environmental problems have been cleaned up. (E) 2011
- Dump mining/economic re-use of resources (G) 2021
- 50 percent of all old landfills are mined for their wealth of materials, which are re-used or recycled into products (E) 2041
- No landfills (G) 2051

STRATEGIES

Full Cost Accounting

- With power problem that we have evaluate landfill and incineration, they may be more cost effective than recycling (SW)
- Incineration and energy recovery will not happen until landfill costs vs. wastes to energy costs are closer, grants for capital or landfill regulation tax will change conditions (G)

Regulatory Action

- Enforce deconstruction of re-useable building materials (E)
- Implement a statewide flow control ordinance / law effectively immediately within one year. How? Put in plan (G)
- Close illegal landfills have EPA and Ecology enforce regulations (G)

Materials Processing and Management

- Build a zero waste facility in Spokane (E)

Incineration

- With public health as the justification, the Spokane incinerator shall be immediately taken out of commission with appropriate legal action if necessary to prevent undue financial harm to tax payers (E)

Incentives and Disincentives

- End hidden subsidies for wasting such as fees on property owners to subsidize incinerators (E)
- Institutionalize 'pay as you throw' trash fees (E)

Comments and Concerns

- Landfill mining dangerous and not practical landfills will always be needed (G)

FUNDING FOR GOVERNMENT SOLID WASTE PROGRAMS (ISSUE PAPER 4)

From here out, costs will be shifted to those who generate waste so future generations are not burdened by the past. Flow control opportunities will be explored to increase funding security. Taxation will be explored as an alternative to tipping fees.

MILESTONES

- MONEY! Larger grants with less restrictions on its use (G) 2001
- Flow control (G) 2001
- Secured funding to sustain current capital equipment (G) 2001
- Flow control - responsibility and control (G) 2001
- No new regulations without cash (G) 2001
- Government solid waste program funding is not dependent on waste generation but rather costs are internalized and included in product price (E) 2003
- Garbage tax on products to sustain solid waste recycling and disposal programs (G) 2003
- Cash to local governments (G) 2003
- Put in budget to purchase land for an eco-park (E) 2003
- Government solid waste program funding not dependent of waste generation (G) 2011
- Tipping fees are paying off landfill closures. Reality check! Need funding in order to solve this problem (SW) 2011

STRATEGIES

Grants

- Change in CPG rules to allow replacement equipment and operational costs, less restrictions on money use (G)

Taxes

- Legislation taxing products based on disposal needs and the money returned to local governments to fund their programs (G)

Materials Processing and Management

- Major funding funnel to building a zero waste facility that will then be used by private businesses to reuse refuse (E)

ELIMINATION OF WASTE (ISSUE PAPER 5)

Within one year, a representative panel in the East region will be formed to explore opportunities and challenges to achieving zero waste and are mandated to create a plan within three years. Within five years, producers and consumers will be educated on how waste can become a resource and the effects of materials on human health, the environment, and economic viability. Per capita waste will be reduced by five percent per year.

MILESTONES

- Form a task force to work on a zero waste plan (E) 2001
- Adopt a zero waste goal and provide leadership, dialogue, and information on how to achieve it (E) 2003
- Grants are made available for business and government to implement zero waste infrastructure systems (E) 2003
- Zero waste facility up and running (E) 2011
- Zero waste equals zero materials being buried/stored. New programs implemented in 20 years. Old waste (radioactive/toxic) in 60 (E) 2021
- Zero waste equals zero materials being stored or buried. Possible in 50 years! (E) 2041 & 2051
- 100 percent zero waste. Waste perfect world (SW) 2061

STRATEGIES

Regulatory Action

- We need packaging reduction guidelines like the Netherlands packaging covenant, Canadian National Packaging Protocol, or Germany's mandatory packaging ordinance that has resulted in 13 percent drop in per capita consumption of packaging from 1992 to 1997 (E)

Materials Processing and Management

- All cities over 30,000 population must have a zero waste facility where all materials are screened and separated for multiple reuse/recycling avenues (CC)
- Elimination possible if waste to energy used with ash recycling, just costs money, Japan, Europe, Nashville, Chicago (G)
- Create dialogue with other communities also attempting 'zero waste' (Santa Cruz, CA is one we could work with) (E)
- Research zero waste infrastructure systems that are already working, to see how they got there (E)

Education

- Tell people and begin educating people the citizenry about what is in store for the future of zero waste right now - today (CC)

Comments and Concerns

- Not going to happen, cannot be achieved in local Washington State (G)
- Not realistic to expect 100 percent (G)
- Recycling will happen due to money (G)

PRODUCT STEWARDSHIP (ISSUE PAPER 7)

Within the next 10 years, reused / recycled materials will increasingly provide the needed resources for manufacturers' products. At least 50 percent of businesses will use closed loop production and other product stewardship practices for at least 50 percent of their products. Within the next 60 years, re-used/ recycled materials will provide at least 50 percent of resources for manufacturers' products.

MILESTONES

- Reused/ recycled materials provide 70 percent of resources for product production (E) 2006
- Reused/ recycled materials provide 60 percent of resources for product production (E) 2006 & 2021
- Closed loop production and other product stewardship practices for 50 percent of products (G) 2011
- Closed loop production and other product stewardship practices are implemented by 70 percent of business sector (E) 2011
- Continue to support reduction of environmental impacts resulting from product innovation, closed loop production, and other product stewardship (SW) 2011
- Closed loop production implemented by 50 percent of businesses (E) 2011
- 50 to 75 percent of materials are being re-used and remain in the production or organics cycle (E) 2011 & 2021
- Reused/ recycled materials provide 50 percent of resources for product production (G) 2031 & 2061

STRATEGIES

Incentives and Disincentives

- Need economic incentive before any significant amount consistently will be reduced (G)
- Incentives to business to reuse their old products in remanufacturing (could be financial, regulatory incentives, etc. (G)

Producer Responsibility

- Place more responsibility on producers of manufactured goods to deal with them once consumer is through, i.e., owner of _____ gives it back to manufacturer when done, as in Japan (E)

REDUCTION OF TOXINS IN MANUFACTURED GOODS

Within in the next 15 years, toxins in products and waste will be reduced by 50 percent. And in the next 30 years, incentives will promote manufacturers to use recycled or high-recycled content raw materials, and will eliminate toxins in their product designs.

MILESTONES

- Toxins in products and waste are reduced 50 percent (SW) 2016
- 100 percent of manufacturer use disassembly, ease of recycling, toxin reduction, and recycling content in design (E) 2021
- 75 percent of manufacturers should have incentive to develop product easily. Recycled or high-recycled content remains in production or organics cycle, along with toxin reduction (SW) 2031

STRATEGIES

Incentives and Disincentives

- Regulatory approach and or tax consequences (G)
- Incentives rewarding beneficial development and enforced taxation for non-compliance (CC)

Regulatory Action

- Enforce tougher standards for what types of substances may be used for yard / garden care so that organic waste (compost) is safe for many uses (E)
- Phase out the use of chlorine in all industries allow only chlorine free paper in the next several years (E)

Incineration

- Toxins are part of garbage, incineration to destroy toxins, do not store (G)

Research

- Research on ways of reducing toxins or making products less toxic (SW)

Full Cost Accounting

- Factor in the costs of health effect caused by toxins / toxicants when doing cost analyses, i.e., dioxin - cancer, creates greater healthcare costs (E)

Comments and Concerns

- Clearly define what levels we are willing to live with as 'good enough' and are limits scientifically, economically, and logically feasible (G)
- How will we make global change to affect our state? (SW)

WASTE PREVENTION (ISSUE PAPER 6)

Within the next 10 years, waste prevention policies and manufacturing practices will exist that maximize product life and promote the reutilization of a variety of materials, including construction and manufacturing.

MILESTONES

- Ban single-use disposable products from public events and festivals (E) 2001
- No tires with less than 80,000 miles capability (7 years) (G) 2006
- Institute building policies that require reuse and recovery of building materials in new construction and in building demolition projects (deconstruction) (E) 2006
- Shields implemented for future rule making (E) 2006
- Monthly refillable bottles and deposit on all beverage containers (E) 2006
- Reduce planned obsolescence through costs of waste disposal of products internalized and included in prices of products (SW) 2006
- No colored glass. No multiples plastic containers (G) 2011

STRATEGIES

Incentives and Disincentives

- Tax incentives for green sustainable developments (E)

Partnerships

- A direct appeal should be made immediately to all architects and engineers in exploring future solutions regarding the building industry (E)

Education

- Showcase construction projects such as straw bale houses, cob cells, recycled materials, etc. which generate little or no waste in construction and or use (E)

Comments and Concerns

- Prevention will happen if economics make sense (G)

CONSUMER AND INDUSTRY INCENTIVES

[Selected but not revised due to lack of time in Meeting 4]

Within the next 10 years, financial incentives will exist that target both consumers and industry that participate in recycling, conservation, and pollution reduction efforts. In addition, subsidies for virgin material extraction will be eliminated.

MILESTONES

- Consumers who compost, conserve water, buy recycled, etc. should have reduced property taxes. (E) 2003
- Legislated corporation accountability laws make corporations responsible for packaging and recycling products. (E) 2003
- Business license fees increase in proportion to environmental pollution (E) 2003
- Consumers who demonstrate significant recycling at home should not have mandatory weekly disposal fees on monthly bills (E) 2003
- Institutionalize pay-as-you-throw trash fees (E) 2006
- Manufacturers with take back programs receive tax break or bonus for each product reused (E) 2006
- All subsidies for virgin material extraction are eliminated as an incentive to reduce, reuse, and recycle (includes mining, logging, fishing, etc.) (E) 2006
- Pass local ordinances banning use and/or sale of certain types of materials that cannot be re-used, repaired, recycled or composted (E) 2011
- Risk associated with beneficial use activity relieved (E) 2011
- Whatever is done needs to be able to keep business alive in order to resell because this is my retirement (SW) 2011

STRATEGIES

Remove Subsidies

- The legislature will vote to eliminate all subsidies for virgin materials extraction such as logging and mining, including any and all tax breaks, to give the incentive to using recycled materials (CC)

Taxes

- Impose heavy taxes on all virgin materials extracted from our bio-region and possibly for those imported into our bio-region (E)

Incentives and Disincentives

- Larger increments between service levels, double costs for two cans as one, etc. (G)

Consumer Demand

- Rather than introducing a law, put money into an advertising campaign that will teach the necessity of reuse materials thus putting pressure on industry to conform (G)

Comments and Concerns

- State programs to provide incentives or punishment for not complying need to be implemented (G)

MILESTONE TOPICS NOT INCLUDED IN THE KEY 11

ROLES AND AUTHORITIES (ISSUE PAPER 2)

Within the next year, appropriate rules and regulations to be in place for all items listed under solid waste, with different rules for different areas. Regions will be defined appropriately. In addition, there will be legislative authority and autonomy to solve local problems.

MILESTONES

- Stop subsidizing polluting businesses (E) 2001
- Enforcing burn barrel issues. Ecology responding to these areas (SW) 2001
- Governor appoints blue ribbon task force to produce white paper on true cost of trash/garbage (E) 2001
- Demand environmentally enlightened legislators. Make sustainability a major issue during elections (E) 2001
- Ban throw-away (single use products) - razors, eating utensils, pencils, pens, paper, and plastic grocery bags (E) 2001
- Initiated citizen communities draft legislation to promote sustainability (E) 2001
- Economic hardship for businesses should not affect rules that must be implemented to reach zero waste (economics should never play a role in environmental protection) (E) 2001
- Pass legislation to mandate funds to be used at local government levels. No restrictions (G) 2001
- Funds need to shift from building roads for more cars to an environmental infrastructure (E) 2003
- "Cradle to grave" legislation is set in place to reduce/eliminate packaging and built in obsolescence (E) 2003
- Stop subsidies for virgin materials extraction, processing, and manufacturing (E) 2003
- Rules and regulations exist that address the appropriate problems. Need different rules for different areas - for all items listed under solid waste. Regions defined maybe too large (SW) 2003
- Legislative authority (autonomy) to solve local problems (G) 2006
- Virgin, raw materials are taxed, with taxes going toward research and development on alternatives to raw materials (E) 2006
- Nation-wide legislation to produce only clear glass (G) 2006
- Taxes for more harmful, non-recyclable products should increase and that revenue should go toward business education (E) 2011
- Income tax returns should be greater for people without children (more people need more stuff and produce more waste) (E) 2011
- There is a lack of leadership and vision by powerful business, industry, and elected officials, to move forward channeling funding towards these ends (E) 2011

STRATEGIES

Stakeholder Involvement

- Since our area has an incinerator (without public participation consent) the public should have clear education and voting opportunities (E)

Comments and Concerns

- State - prioritize, local - implementation; state incentive taxes credits, disincentives regulations (G)
- Appropriate rules must be determined by people effected in a region and they need to know the effect of those rules on the economy, lifestyle and environment (E)

WASTE DISPOSAL REDUCTION (ISSUE PAPER 5)

Within the next 10 years, the waste exchange and re-utilization opportunities that currently exist will be utilized to achieve a 40 percent increase in solid waste diverted. Within the 10 year period, waste disposal will go down by 75 percent. In addition, new systems will be explored, including discard malls" with space leased to provide sector tenants (similar to the systems in airports).

MILESTONES

- Waste exchange, re-utilization opportunity exists (SW) 2001
- 40 percent solid waste diversion (G) 2005
- Establish "discard malls" and lease space to provide sector tenants, the same way airports are usually run (E) 2006
- Waste disposal goes down by 75 percent (E) 2006
- Waste disposal down by 90 percent (E) 2021
- Waste disposal goes down 40 percent (G) 2021

STRATEGIES

Materials Processing and Management

- All solid waste disposal facilities will have 'waste screening' as a first stop when receiving waste to further separate for reuse or recycling all possible multiple materials (CC)
- Store toxic materials until a responsible method for disposal is understood, businesses that are responsible for toxic products (both pre-existing and new) should bear the burden of cost (E)

Regulatory Action

- Close private landfills!!! Burning garbage in burn barrels is NOT recycling (SW)

Producer Responsibility

- If industry is to remain self regulating to the degree it currently is, materials that cannot be recycled must be borne by the industry (E)
- Store toxic materials until a responsible method for disposal is understood, businesses that are responsible for toxic products (both pre-existing and new) should bear the burden of cost (E)

Comments and Concerns

- Waste reduction by numbers listed in narrative not possible until system dramatically is changed (G)
- 40 to 75 percent is not realistic to achieve in this time frame (SW)

WASTE GENERATION

Within the next 10 years, waste generation will be reduced significantly. Within 30 years, a 90 percent reduction level will be reached.

MILESTONES

- Waste generation goes down by 75 percent (E) 2006
- Waste generation down 20 percent (G) 2021
- Waste generation down by 90 percent (E) 2021

STRATEGIES

Regulatory Action

- End incineration in a transitional program to zero waste (CC)

Incentives and Disincentives

- Households pay by the number and type of waste thereby encouraging waste stream economy in the home (E)

Comments and Concerns

- Assume increase generation based on last 50 year history; we need more garbage in order to do recycling (G)

LOCAL COORDINATION

Within the next year, municipal partnerships will be created to maximize jurisdictional cooperation, save money, and increase responsiveness. Rules to make those partnerships exist will be simplified so that when plans are updated an amendment is adopted. In addition, county SWACS will set up citizen communities all over the state to involve the public in planning and implementation.

MILESTONES

- A fast track of municipal partnerships exists to maximize jurisdictional cooperation to save money and increase responsiveness. Rules to make those partnerships exist are simplified. Next time plans are updated the amendment is adopted. Don't wait to do something right (SW) 2001
- The solid waste system will set up citizen communities all over the state (each county) under SWACs to create the vision and implement (E) 2001
- Communities form study groups to look at plans that are working and use those plans to build sustainable communities (E) 2001

STRATEGIES

Partnerships

- Ecology will work with local government to strengthen the role of local SWACS to insure public participation (CC)

Comments and Concerns

- Develop holistic resource management systems to create efficient use of resources - virgin resources should be the last option (E)

RESEARCH AND DEVELOPMENT

Within the next 10 years, incentives will exist that promote research and development efforts to address the expansion of the infrastructure so it is capable of taking current waste products and making them into usable products. In addition, market research will be conducted to explore grants or tax breaks for these types of businesses in the short-run.

MILESTONES

- Research and identify the waste reduction and reutilization of bottle necks and incentives to develop and engage in market research (SW) 2001
- We need to expand the infrastructure capable on taking current waste products and making them into usable products. Grants or tax breaks for these types of businesses by 2006 (E) 2006
- Scientific re-use. More research and development (G) 2006

STRATEGIES

Remove Subsidies

- Development of markets free of government subsidies if we create a false economy in recycling and diversion it will not sustain itself (G)

Technological Solutions

- Research and development is necessary, create opportunities, solve problems with technology (G)
- Tax money designated for this research (G)

APPENDIX C NORTHWEST - Seattle

REGIONAL RECOMMENDATIONS AND IDEAS FOR INCLUSION IN THE STATE SOLID WASTE PLAN REVISION

INTRODUCTION

This appendix contains a summary of the outcomes of all four meetings in the Northwest Region (Seattle). This is the information that was used for the development of this statewide round table meeting report. It reflects the work done in Meeting 4 by the regional round table participants in reviewing a draft vision and the milestones to accomplish that vision. In addition, the appendix includes a listing of all the ideas and recommendations developed in Meetings 2 and 3, which have not been altered. The appendix has three sections:

1) Section 1: Regionally Recommended Vision. This section reflects the results of Meeting 4 on creating a regionally recommended vision statement.

2) Section 2: Key Milestone (Goal) Statements. This section includes a summary of common perspectives on key milestone summary statements for the Northwest Region (Seattle) meetings.

3) Section 3: All Milestone Summary Statements, Milestones, and Strategies. This section includes all milestone summary statements, all milestones, and all strategies generated in the Northwest Region (Seattle) meetings.

SECTION 1: REGIONALLY RECOMMENDED VISION

Below is a draft vision for the state solid waste plan that reaches beyond 20 years. The original draft version, published in *Issues Identification: Issues for Consideration and Discussion*, Ecology Publication #01-07-001, was tailored to include feedback from the first three Northwest Region round table meetings. Participants in Meeting 4 explored support for this regionally tailored vision. The outcome of their work is reflected in the draft vision below. Comments and ideas that came from individuals, not the group as a whole, are noted below the vision.

NORTHWEST (SEATTLE) REGIONALLY RECOMMENDED VISION

Cornerstone to the state's overall move to sustainability is its solid waste system, which is based on principles of sustainability and engages all residents and businesses in meeting the current and future economic, environmental, and social needs of their regions. Materials are handled sustainably though such practices as waste reduction, material reuse, product stewardship, and pollution prevention. Current needs are addressed while preparing for future opportunities and challenges.

BUSINESSES balance material and energy use with practices that reinvest in environmental, social, and financial capital, recognizing that such stewardship is the basis for their survival and profit. Businesses are product stewards.

INDIVIDUALS achieve sustainability as inhabitants and consumers. People may choose to reduce consumption. When purchasing, they demand, are provided with, and choose goods and services with the lowest life-cycle impacts on energy and materials use.

COMMUNITIES foster their long-term viability through shared ownership and pride in the benefits of sustainability. Communities live within the limits of the economic, environmental, and social carrying capacity, with awareness of how local choices impact global resources.

GOVERNMENT policies drive sustainability, while continuing to protect the environment, economic, and social needs of the state. The unique needs of urban and rural communities are addressed.

ADDITIONAL INDIVIDUAL COMMENTS

Opening Paragraph
- Add 'No waste is generated in Washington state.'
- The state may not actively move toward sustainability and it is therefore not accurate to say there is an 'overall move to sustainability.'
- The role of the solid waste plan in relation to the broader vision of sustainability should be addressed in the vision.
- The introduction to the vision should indicate a timeframe.
- The 'three legs of the stool' of sustainability (environmental, economic, and social) should be mentioned is in each of the four sections of the vision.

Add to Milestones in Regional Recommendations
- Add to Milestones for Funding for Solid Waste Programs, 'Adequate resources for the solid waste system are secure and allow for flexibility in addressing the changing characteristics of solid waste.'
- Add to Milestones for State and Local Planning, 'State and local plans identify what needs to happen to move toward sustainability and invites increased responsibility from the broader community in an effort to address larger resource and energy conservation issues.'
- Add to Milestones for Solid Waste Facilities, 'Municipal solid waste disposal systems including facilities are community-friendly and address transportation impacts.'
- Add to Milestones for Solid Waste Facilities, 'Members of the public perceive they are treated fairly.'

Government
- Add 'reflecting the true costs associated.' to strategies.
- Define sustainability up front so it is a given that it is there.

Individuals
- Add to Strategies for Changing Behavior and Attitudes, 'Individual behavior change happens through incentives, social change, and regulations.'
- Communities live within global environmental and social carrying capacity.

Communities
- Take out community as an individual bullet point.
- Communities live within global environmental and social carrying capacity.

SECTION 2: KEY MILESTONE (GOAL) STATEMENTS

At the final meeting in June, Meeting 4, participants identified common perspectives on key issues. They selected 13 of the most important issue topic headings out of 18. Participants worked together to revise the summary statements most important to them to better reflect the goals they see as critical to the state solid waste plan.

The following are the milestone summary statements for the 13 topic headings selected and revised by participants. Any comments and ideas that came from individual participants and not the group as a whole are noted below the statement. NOTE: of these 13 most important topics, the last four below were not revised by participants due to lack of time in Meeting 4. They are nonetheless included as they were selected by the participants and reflects discussions by participants in Meeting 2.

NORTHWEST REGION'S 13 KEY MILESTONE TOPICS AND SUMMARY STATEMENTS

PRODUCT STEWARDSHIP (ISSUE PAPER 7)

Within four to five years, high risk materials that have detrimental environmental impacts will be identified. Following identification these materials will be phased out, one each year. Within five to six years, government procurement policies will be in place supporting use of sustainable materials and reducing use of material intensity and toxicity. Within 10 years, product stewardship principles will be identified for Washington state industries and a statewide product stewardship policy and strategy will be adopted. A program will be developed to assist Washington-based industries and businesses to meet product stewardship principles. Within 10 years, a plan for coordination with other states nationwide will be developed. Within 15 years, packaging and 'big ticket' consumer products will be manufactured with reuse, recycle, or take back included in their design. Within 35 years, non-renewable resources use in production will be significantly reduced, with 99 percent of natural resources extracted used throughout all phases of production.

Additional Individual Comments

- Infrastructure maturation is needed so a product, process, or material can then be banned.
- More than take-back is needed - service and repair of products.

WASTE PREVENTION (ISSUE PAPER 6) (WASTE GENERATION ADDED)

Within this year, prevention will be the top priority in waste handling. Waste prevention strategies will define top priority wastes, and wastes with higher toxicity will be considered high priority for early action. Starting five years from now, per capita waste generation will be reduced from the 2001 level at a level of one percent per year. Within 30 years, the public will support waste minimization strategies (all materials collected are directed to reuse or remanufacturing).

Additional Individual Comments

- Percentages are needed. It should be added to strategies under waste prevention.
- Add to strategies under Waste Prevention 'Within 10 years government and business practices will significantly reduce the amount of non-recyclable packaging and packaging in general, as well as reduce the number of disposable products.'

ADDRESS SPECIAL WASTE STREAMS (ISSUE PAPER 1)

Immediately, alternatives will be identified for hard-to-handle materials. Waste recycling processes will be implemented. Economically viable alternatives will be in place that support implementation. Within two years, waste streams will be defined and criteria developed to rank toxicity and local opportunities for alternative handling. A prioritized list will be created for strategy development. Biomedical waste regulations and standards will be in place statewide. Food composting, livestock waste recycling, and bulky item collection will be available in 75 percent of the state.

Additional Individual Comments

- The economic system needs to be set up in such a way that it is feasible to address these wastes.
- Do not leave out the livestock wastes.

COMPLETE COSTS OF SOLID WASTE (ISSUE PAPER 10)

The full social and environmental costs of materials production and waste hauling will be reflected in product pricing, waste disposal and recycling prices. Within 10 years, a system and incentives will be developed, making it easy for government and businesses to use life cycle cost accounting for measuring waste generation and environmental performance of government and businesses. A significant number of these entities will utilize life cycle cost accounting' methods.

Additional Individual Comments

- True cost accounting - full cost accounting - should use life cycle costs as the term.
- Public policy measures need to be aligned with the goals of full cost accounting.
- How long will it really take to change accounting systems?

CHANGING BEHAVIORS AND ATTITUDES

Within the next year, education programs will target citizens, public officials and industry with the message of waste reduction, recycling, and more sustainable products. Within 10 years, 50 percent of all products will contain recycled content material. There will also be an increase in education programs that convey the true costs of products, garbage disposal, and resource conservation.

RECYCLING MARKET DEVELOPMENT (ISSUE PAPER 11)

During the next year, the state market development agency will be reinstated. State and local agencies will actively work to develop recycling markets. Within the next 10 years, strategies will be in place at the state and local levels to promote recycling market development for organics, plastics, paper, and hard-to-recycle materials. Rural areas' unique market needs will be addressed. Within 20 years, re-use options will exist for all materials and recycling processes will be more energy efficient and profitable than virgin manufacturing.

Additional Individual Comment

- Include research and development.

CONSUMER AND INDUSTRY INCENTIVES

Within the next year, counties and businesses will establish a waste generation baseline and waste reduction goals. Within 10 years, government incentives will promote reuse/recycle products, and remove subsidies and incentives for virgin materials. Waste reduction industries will be supported through incentives, and transportation hurdles will also be addressed.

Additional Individual Comments

- Leverage points are tax subsides, incentives, and economic policies.
- A level playing field needs to be established.

REDUCTION OF TOXINS

In the next 10 years, there will be a reduction in toxins through targeted efforts in industry, production, product choice, clean-up, and recycling. Non-toxic and minimally-toxic products will be predominate in the market place.

RESEARCH AND DEVELOPMENT

Within 10 years, government economic development policies will support research and investment in technologies that support waste and pollution reduction, including recycling processes, energy recovery, and transportation solutions.

FUNDING FOR GOVERNMENT SOLID WASTE PROGRAMS (ISSUE PAPER 4)

[Selected but not revised due to lack of time in Meeting 4]

Within 10 years, funding mechanisms for local government will be in place at adequate levels to implement and evaluate goals outlined in state and local solid waste plans. Funding will be diversified and no longer be dependent on the generation of waste.

WASTE DIVERSION (ISSUE PAPER 5)

[Selected but not revised due to lack of time in Meeting 4]

Within 10 years, all compostable organic, construction, and demolition wastes will be diverted from the municipal solid waste stream, and composting facilities will be built. State and local agencies will support and utilize recovered materials in development activities. And within 40 years, economical material separation and refining process will be used to maximize recovery for each waste stream so no portion of the state's waste is disposed without being processed to pull out recoverable materials.

WASTE HANDLING FACILITIES (ISSUE PAPER 5)

[Selected but not revised due to lack of time in Meeting 4]

Within 10 years, solid waste collection and facilities will have the capacity to process all wastes for maximum recovery of energy and material, and privatization will be accepted. Within 60 years, materials will move directly to industry for use in manufacturing.

RECYCLING (ISSUE PAPER 11)

[Selected but not revised due to lack of time in Meeting 4]
Within the next year, a consistent definition of recycling and effective rate measurement will be developed. Within 10 years, mandates for recycling will consider the markets and facilities to support such rates, and needed recycling and composting facilities will be built. Recycling services and their efficiency will be increased statewide, reaching a 50 percent recycling rate in 10 years and a 75 percent rate in 20 years. Within 30 years, more recyclables will be collected than solid waste.

SECTION 3: ALL MILESTONE SUMMARY STATEMENTS, MILESTONES, AND STRATEGIES

During Meeting 2, participants drafted milestones, or goals along the way, to a more sustainable approach to solid waste in Washington state for both the long-range vision and the current system needs. The milestones serve as landmarks that help measure progress toward the future solid waste system envisioned. The milestones were then grouped under topic headings by the facilitators and the themes were captured in summary statements.

The following is a compilation of all milestone summary statements (both the top 13 and also the others that did not receive as much emphasis), all individual milestones, and all strategies generated in the Northwest Region (Seattle) meetings. It is a compilation of the meeting summaries from meetings 2, 3, and 4.

The milestones are grouped by topic. If the topic is related to an Issue Paper from *Identification: Issues for Consideration and Discussion,* Ecology Publication #01-07-001 the source is noted. The milestone summary statements at the beginning of each topic group are the same ones used in the above section. These summary statements are followed by all of the individual milestone ideas raised.

In Meeting 3, participants identified specific actions or strategies they think would best accomplish the milestones identified in Meeting 2. The strategies have been merged beneath the milestone topic heading under which they were posted.

As a guide for the reader, each milestone includes in parentheses the initial of the breakout group in which it was created it and the year it was placed on the timeline. The initials for the sector breakout groups stand for the following:

(B) = Business
(C) = Community & Civic Groups
(E) = Environment
(G) = Government
(SW) = Solid Waste Industry

NOTE: These sector groups are not intended to be representative of the sectors themselves, but merely provided an opportunity for people to propose ideas from various perspectives.

NORTHWEST REGION'S MILESTONES & STRATEGIES

13 KEY MILESTONE TOPICS

PRODUCT STEWARDSHIP (ISSUE PAPER 7)

Within four to five years, high risk materials that have detrimental environmental impacts will be identified. Following identification these materials will be phased out, one each year. Within five to six years, government procurement policies will be in place supporting use of sustainable materials and reducing use of material intensity and toxicity. Within 10 years, product stewardship principles will be identified for Washington state industries and a statewide product stewardship policy and strategy will be adopted. A program will be developed to assist Washington-based industries and businesses to meet product stewardship principles. Within 10 years, a plan for coordination with other states nationwide will be developed. Within 15 years, packaging and 'big ticket' consumer products will be manufactured with reuse, recycle, or take back included in their design. Within 35 years, non-renewable resources use in production will be significantly reduced, with 99 percent of natural resources extracted used throughout all phases of production.

MILESTONES

- 50 percent of manufacturers increase recycled content, decrease in toxins, decrease in packaging, increase ease of recycling (E) 2006

- Electronics taken back by producers (E) 2006
- 100 percent implementation of source control - allow less pathogenic and toxic contaminants to be used in products so waste doesn't add to cleanup issues (E) 2006
- 100 percent of products are developed/made after a life cycle analysis (G) 2006
- Regarding product stewardship, target certain products to remove from solid waste, such as computers, tires, and others with toxics or non-renewable resources. Through product stewardship, materials that meet certain criteria are removed from waste stream (computers, etc.) (B) 2006
- Product stewardship throughout all industries (E) 2011
- 100 percent of manufacturers use disassembly, ease of recycling, toxin reduction, and recycled content product design criteria (E) 2011
- 100 percent of manufacturers increase recycled content, decrease in toxins, decrease in packaging, increase ease of recycling (E) 2011
- Manufacturers are responsible for materials in their products from "cradle to grave" (E) 2011
- Manufacturers are held responsible for disposal/reclamation of their products and packaging (G) 2011
- The move away of disposal toward reuse is a national trend that is coordinated and standardized (G) 2011
- 100 percent of high-tech products are designed for maximum recyclability/disassembly/low energy G) 2011
- Consumers really do buy environmentally preferable products and packaging (rather than just say they do) (B) 2011
- Materials are produced and maintained using least environmentally damaging chemicals and processes possible (B) 2011
- Use of non-renewable resources are reduced by 50 percent (B) 2011
- All cars, computers, large ticket items are designed for de-manufacture and recycling (SW) 2021
- All new "big ticket" consumer products - cars, computers, appliances - are taken back by manufacturers when obsolete (C) 2031
- Product packaging in universally accepted forms to limit number of waste stream types (G) 2031
- Industries and businesses thrive by using "waste outputs" from others as inputs to their processes (B) 2031
- Product stewardship implemented for all products and services (SW) 2031
- All businesses and industries use bio-based alternative fuels (G) 2031
- 99.9 percent of natural resources used from "cradle to grave" are utilized (B) 2051
- Raw materials and renewable resources are valued equally across markets (B) 2051
- Non-renewable resources are no longer used - less than 15 percent of total (B) 2051

STRATEGIES

Full Cost Accounting

- 100 percent of retail product pricing includes full life-cycle analysis where manufacturer is responsible for product/ packaging from cradle to grave (G)
- Require 'de-regulations' pricing of retail products, cost breakdown shown for materials, packaging, labor and shipping. State sales tax on portions of price that causes most harm, packaging (G)

Producer Responsibility

- Attempt to establish regional industry agreements for manufacturer responsibility for items such as electronics and if unsuccessful establish regulatory system (G)
- Produce take back system developed by 2006 where producer handles all costs for electronics (G)
- Target certain products for manufacturer responsibility, including electronics, tires, paint, and carpet (E)
- Expect industry to meet performance requirements in the product stewardship and recycling programs. Establish responsibilities and percentage expectations (G)

Regulatory Action

- Establish policies and laws that encourage life cycle 'true costs' analyses before products are developed and made including 'take back' (E)
- Require producers to take back electronics (E)
- State lays out process and timeline for developing and adopting product stewardship policies (E)
- Set rates and dates for certain recovery percentages (E)
- Set rates and dates for specific recovery percentages or if not met, producers held accountable for costs (G)

Education
- Begin elected official, consumer, and industry education on product stewardship (G)
- Create Washington State Natural Step Network (E)
- Consumer education about product stewardship/ manufacturer responsibility (E)
- State endorses product stewardship as important tool and identifies product stewardship principles (E)

New Data and Measurement Tools
- Have product stewardship approach assessed for all materials streams for feasibility and implement where effectives (G)
- Develop life cycle process to originate waste and control measures to eliminate toxins, etc (E)

Financial Incentives and Disincentives
- Provide tax incentives for product leasing (G)

Stakeholder Involvement
- Product stewardship stakeholder groups formed for targeted materials (E)

WASTE PREVENTION (ISSUE PAPER 6) (WASTE GENERATION ADDED)

Within this year, prevention will be the top priority in waste handling. Waste prevention strategies will define top priority wastes, and wastes with higher toxicity will be considered high priority for early action. Starting five years from now, per capita waste generation will be reduced from the 2001 level at a level of 1 percent per year. Within 30 years, the public will support waste minimization strategies (all materials collected are directed to reuse or remanufacturing).

MILESTONES

- Shift from recycling to prevention as top priority (E) 2001
- Get fast food industry to support the "zero waste" message (used advertising to influence) (E) 2001
- Diaper service should be free to parents (C) 2001
- School lunches are made and delivered with 100 percent recyclable/reusable materials (B) 2001
- Implement simple method to ban delivery of "junk mail" upon request of business/consumer (B) 2001
- Regional/state reuse website (SW) 2001
- Ban the use of non-recyclable plastics (B) 2003
- Leasing" of products is common (E) 2006
- Excess packaging prohibited (B) 2003
- Incentives for more conservative package (B) 2003
- Implement rules and regulations about disposable products (repair vs. replacement). Make repairable products - e.g., small appliances (B) 2006
- Implement rules regarding what categories of recyclable packaging may be used (B) 2006
- Reduce use of wood bedding products by 50 percent (horses) (E) 2011
- Paperless offices are the norm (E) 2011
- The last newspaper recycling program closes (G) 2011

WASTE GENERATION MILESTONES

- Per capita "waste" generation down 25 percent. "Waste" equals disposal plus recycling (E) 2011
- Business takes leadership in waste reduction activities (B) 2011
- Per capita "waste" generation down 50 percent. "Waste" equals disposal plus recycling (E) 2021
- Public supports zero waste (C) 2021
- Community investment in local waste production. Waste is not exported (B) 2021
- Zero waste (E) 2031
- Zero waste landfilled or collected or generated at curb or MSW (G) 2031
- Sustainable building practices are mainstream - use recycled materials, energy alternatives (E) 2021
- Businesses reduce waste going to landfills by 80 percent from current levels (B) 2021

STRATEGIES

Regulatory Action
- Eliminate / make illegal non solicited junk mail, individual must request to receive literature or implement simple method to return to sender / postage paid so that generator must deal with waste (G)
- Update building codes to require new construction to be more energy efficient and generate less waste in their maintenance (G)

- Change policies and or laws to reduce to eliminate 'junk' mail, excess packaging, non-recyclable plastics, fully disposable products, etc. (E)
- Banning the use of non-recyclable plastics by regulating industry and prohibiting / rewarding recyclable products (SW)
- Require all food service packing (take out, etc.) to be 100 percent recyclable (G)
- Require state school food services to utilize 100 percent reusable serving utensils (trays, forks, etc, including milk cartons) (G)
- Require school food and nutritional services, breakfast, lunch programs, to utilize serving utensils including milk containers (G)
- Require government in-house prevention programs (E)
- Institute measures to stop excess production of materials and build a base industry for repairing products (E)

Financial Incentives and Disincentives

- Add 'waste' tax to fast food take out orders at restaurants (G)
- Require businesses and retailers to breakout price of grocery bags from product charge extra rather than give credit for bring your own (G)
- Tax packaging (E)
- Incentives for locally produced agriculture products and food (E)

Partnerships

- Promote construction and demolition reuse and reduction including partnerships with construction industry (E)

Incentives and Disincentives

- Solid waste companies provide options for less frequent collection, smaller containers, and publicize options (E)
- Provide technical assistance to businesses re: reducing packaging both up and down stream (E)

Education

- Implement waste prevention consumer education programs, e.g., 'voluntary simplicity' (E)

Grants

- Create state grant to local governments specifically for reduction/prevention (E)

WASTE GENERATION STRATEGIES

Materials Processing and Management

- Using sensible practices to reduce waste and increase most cost effective use of materials (E)
- Garbage generated within county or state needs to be handled and disposed of within those areas, driver for waste prevention (G)
- Increase reuse facilities and exchanges (G)

Education

- Develop and communicate specific waste reduction goals to all sectors (B)
- Start education on waste reduction recycling prevention in schools, elementary, middle, and high school (SW)

Full Cost Accounting

- Establish a system whereby costs of exporting waste is evaluated in 'global' terms and overall impacts on society in general not just 'locally' (E)

ADDRESS SPECIAL WASTE STREAMS (ISSUE PAPER 1)

Immediately, alternatives will be identified for hard-to-handle materials. Waste recycling processes will be implemented. Economically viable alternatives will be in place that support implementation. Within two years, waste streams will be defined and criteria developed to rank toxicity and local opportunities for alternative handling. A prioritized list will be created for strategy development. Biomedical waste regulations and standards will be in place statewide. Food composting, livestock waste recycling, and bulky item collection will be available in 75 percent of the state.

MILESTONES

- Identify alternatives for hard-to-handle materials (E) 2001
- Augment funding for manure digesters (dairy) (E) 2001
- Provide additional means of dairy waste utilization (i.e., digesters) (E) 2003

- Work with horse owners to reduce waste stockpiles (E) 2003
- Recycle 100 percent livestock waste in short-term cycle (E) 2006
- State-wide biomedical waste regulations/standards (E) 2006
- 75 percent of state has access to food compost programs (G) 2006
- Bulky item collection is available to 75 percent of state (G) 2006
- Paper made "tree free" (E) 2006

STRATEGIES

Partnerships

- Integration of water, agriculture solid waste etc., departments to address agricultural waste and other materials activities in interdisciplinary way (G)
- Work with agriculture interests to reduce wood bedding or use only fast composting alder chips (G)
- Encourage special waste recycling salvage by encouraging public / private partnerships or non-profit work in this area (B)
- Match users of waste with producers (E)

Financial Incentives and Disincentives

- Tires- re-establish tire tax to fund tire clean ups and tire recycling market development (G)
- Establish tax on new cars to fund junk vehicle clean up program (G)
- Provide funding for manure digesters through clean water avenues (E)

Incentives and Disincentives

- Provide incentives for locally used agriculture wastes (E)

Regulatory Action

- Increase demand for compost by regulating new development (E)
- Refine compost standards for buyoff and support for local Health Departments (E)
- 16, 000, 000 more tires coming - pass tire take back immediately (G)

Education

- Provide on-farm composting classes for agriculture wastes (E)

COMPLETE COSTS OF SOLID WASTE (ISSUE PAPER 10)

The full social and environmental costs of materials production and waste hauling will be reflected in product pricing, waste disposal and recycling prices. Within 10 years, a system and incentives will be developed, making it easy for government and businesses to use life cycle cost accounting for measuring waste generation and environmental performance of government and businesses. A significant number of these entities will utilize life cycle cost accounting methods.

MILESTONES

- Cost for waste disposal is strongly tied to volume (as volume goes up, cost goes up) (B) 2001
- Define criteria to assess fair cost value for disposal of waste to all parties (E) 2003
- 100 percent public fairness. Those who generate non-recycled waste must pay appropriate cost. (E) 2003
- Costs for waste disposal are strongly tied to volume (feel the costs - they are significant) (B) 2003
- Business assistance for green labeling, report cards, measuring baseline, etc. (B) 2003
- 50 percent businesses and government adopt true cost accounting (E) 2006
- Businesses have information systems to readily measure their waste generation and recycling levels (B) 2006
- The full/true environmental and social costs are included in the price of disposal and recycling services (B) 2006
- Manufacturers pay true costs of virgin materials - no hidden subsidies (C) 2011
- 100 percent business and government adopt true cost accounting (E) 2011
- The full/true environmental and social costs are included in the price of material inputs (B) 2021
- Environmental value equals economic value (tangible relationship) (B) 2021
- Restructured economy - value on natural resource consumption (E) 2061
- Align public policy measures with the goals of full cost accounting (Mtg 4)

STRATEGIES

Full Cost Accounting

- Incorporate true cost information in establishing solid waste policy
- Evaluate solid waste system in sustainability terms using 'true costs' both internalized and externalized and hidden subsidies (E)
- Identify externalities not accounted for in solid waste disposal (CC)
- Determine how to internalize external costs (CC)

Producer Responsibility

- Establish 'green' labeling system including monitoring (E)

Remove Subsidies

- End subsidies for landfills and incineration (E)
- Research subsidies on virgin materials and end these subsidies (E)

CHANGING BEHAVIORS AND ATTITUDES

Within the next year, education programs will target citizens, public officials and industry with the message of waste reduction, recycling, and more sustainable products. Within 10 years, 50 percent of all products will contain recycled content material. There will also be an increase in education programs that convey the true costs of products, garbage disposal, and resource conservation.

MILESTONES

- Require all elected officials to read *Natural Capitalism* and *Tax Shift* (E) 2001
- Statewide 'shayos' program (E) 2001
- Education to stimulate consumer demand for less consumptive, more sustainable products (B) 2001
- 100 percent improvement of public education regarding the need for recycling - disposing of all wastes for garbage pickup (E) 2003
- Increase education opportunities on solid waste reduction and recycling (E) 2003
- Conservation must be a priority - resources, energy (C) 2003
- Incorporate recycling ethics in all areas of society (E) 2003
- State/local governments implement real behavior change programs (G) 2003
- People buy 50 percent more recycled (SW) 2003
- Increase public awareness of real costs of garbage disposal - cut down on subsidization by 50 percent (E) 2006
- Business is required to produce "green labels" for all of their products (includes recycle content, energy use, packaging volume, greenhouse gas impacts, etc.) (B) 2006
- Public perception of fairness is at 90 percent approval (C) 2011

STRATEGIES

Education

- Increase education efforts targeted at public awareness of 'true costs' of solid waste (G)
- Education campaign to make littering and illegal dumping 'socially unacceptable' as smoking is now (G)
- Establish significant effort to bring 'Natural Step' to Washington's business community (G)
- Establish a multi-tiered education program starting in the schools and progressing to adults including courses, systems, and impacts (E)
- Educate public to require recycled products thus putting conservation of resources at a priority (E)
- Educate public to the recyclable nature of agricultural wastes (E)
- Individual behavior change happens through incentives, social change and regulations (Mtg.4)
- Communities engage in educational activities to increase citizen and industry understanding of consumer choices and their impacts on solid waste, energy and resource conservation (Mtg.4)

Partnerships

- Establish significant efforts to bring sustainability movement efforts to Washington businesses (G)

Full Cost Accounting

- Economic value equals environmental value (B)

RECYCLING MARKET DEVELOPMENT (ISSUE PAPER 11)

During the next year, the state market development agency will be reinstated. State and local agencies will actively work to develop recycling markets. Within the next 10 years, strategies will be in place at the state and local levels to promote recycling market development for organics, plastics, paper, and hard-to-recycle materials. Rural areas' unique market needs will be addressed. Within 20 years, re-use options will exist for all materials and recycling processes will be more energy efficient and profitable than virgin manufacturing.

MILESTONES

- Market development - local and statewide agencies working (E) 2001
- Use of 100 percent more recycled material in current use product (E) 2003
- Promote recycling/reuse markets for products not currently provided (G) 2003
- State government has a completely implemented procurement program. All products made from recycled materials (G) 2003
- Local reuse businesses increase - local bottlers, repair businesses (C) 2003
- Re-establish a state market development agency (G) 2003
- Costs for recycle/reuse materials are less than raw material costs (B) 2003
- Recycled material quality standards (SW) 2003
- End-markets for reuse and recycling should be a priority (C) 2006
- Recycled content in 100 percent of products (E) 2006
- Green "sustainable" buildings required in-house for state and local governments (E) 2006
- Markets need to be developed for hard-to-recycle materials - textiles, tires, etc. (C) 2006
- Rural areas have local markets for low-value materials (G) 2006
- State and local governments have developed a strategy for promoting recyclables market development. CTED is heavily involved. (G) 2006
- Use recycled material (i.e., plastic) in transportation infrastructure (SW) 2006
- Environmentally-safe mini-mills to recycle paper should be developed (C) 2011
- Plastics are a common commodity in recycling collection systems and markets for recycled plastics are diverse and stable (G) 2011
- All plastics are made from renewable resources (G) 2011
- Require that all packaging be recycled and all products are packaged in recycled material (E) 2011
- Reused or recycle materials provide 50 percent of resources for product production (E) 2011
- Regionalized markets and micro-industry for recycling material (SW) 2011
- Recycling processes - all are far-and-away more energy and cost efficient than virgin manufacturing (C) 2021
- Re-use options exist for every material and are so cost-effective that there is competition (C) 2021
- All new products contain at least 20 percent post-consumer waste (C) 2031

STRATEGIES

Market Development by Government

- Re-establish CWC - demonstrate the need for and a permanent funding mechanism to state legislature the re-establishment of the Clean Washington Center (market development agency) (G)
- Re-establish state market development agency (G)
- Chase after new industries processing and using recycled materials with same fervor as Boeing Headquarters (G)
- Create state market development agency (E)
- Develop market for recycled materials that have collection for recycled products in easy convenient location and require use of recycled products and recyclable end wastes (E)

Regulatory Action

- Set rates and dates for material recycling and recycled product content and establish what happens if not attained (G)

Procurement Standards

- Establish rigorous material purchase requirement with state purchasing for environment preferable purchasing, toxins reduction, and recycled content (G)
- Require sustainable building for state and local government projects (E)
- State sets progressive goals for in-house use of recycled products (E)

Education
- Implement statewide soil improvement initiative and thereby make good use of wood residuals, agriculture waste, bio-solids, and compost (G)

Research
- Identify high potential value items not currently recycled (CC)
- Identify barriers to recycling these items, costs, public acceptance, and perception (CC)
- Tie research and development to actual recycling market development (B)

Partnerships
- Initiate task force approach to work through and around barriers to items not currently recycled (CC)

CONSUMER AND INDUSTRY INCENTIVES

Within the next year, counties and businesses will establish a waste generation baseline and waste reduction goals. Within 10 years, government incentives will promote reuse/recycle products, and remove subsidies and incentives for virgin materials. Waste reduction industries will be supported through incentives, and transportation hurdles will also be addressed.

MILESTONES

- County authority to set incentive rates curbside (E) 2001
- Companies need a waste stream baseline from which to create achievable goals - knowing how much is generated (B) 2001
- Business will follow best management practices and utilize best achievable technologies concept (B) 2001
- Stop subsidizing virgin material production (SW) 2001
- Government subsidies on extracting virgin resources must end (C) 2003
- Government to offer economic incentives or tax breaks to "green" businesses (E) 2003
- Money needs to be used to subsidize materials with high recycle/reuse content to promote use in lieu of raw products (B) 2003
- 'Incentivize' market development for recyclables (SW) 2003
- New recycling technologies and closed loop systems are made financially available to business (B) 2006
- Make grants available to businesses for innovative new sustainable products or packaging (B) 2006
- Ease environmental siting regulations/constraints for new industry that will recycle (SW) 2006
- Exploit technology to reduce waste - especially in manufacturing processes (i.e., government provide incentives for 'ecopreneurs') (E) 2011
- Greatly simplified and accelerate transportation of materials (SW) 2021

STRATEGIES

Education
- Expand 'Built Green' program statewide and promote with public funding (G)

Incentives and Disincentives
- Create incentive program that does not take away from true cost of waste (E)
- Establish incentives promoting reuse/recycle products and reduce to eliminate subsidies (E)

Financial Incentives and Disincentives
- Let people feel the real costs of exploitive materials - increased costs (E)

REDUCTION OF TOXINS

In the next 10 years, there will be a reduction in toxins through targeted efforts in industry, production, product choice, clean-up, and recycling. Non-toxic and minimally toxic products will predominate the market place.

MILESTONES

- Pesticides should not be available over-the-counter - "prescription only" (C) 2001
- Public education on hazardous products should increase (C) 2001
- End products of the recycling industry contain zero percent toxins/pathogens (C) 2003
- 100 percent improvement in reduction of toxic materials - pathogenic materials that are used in production of new products (E) 2003
- Cars should be tested for oil leaks (C) 2003
- Measurable reduction in emissions of greenhouse gasses from solid waste (E) 2006

- Comprehensive meth lab program in place (G) 2006
- No hazardous products are released into the environment/community (C) 2011
- Auto oil changes/oil recycling is automatic at neighborhood sites/stations, thanks to new car design (C) 2021
- Zero non-attainment areas in US (air issue) (B) 2021

STRATEGIES

Regulatory Action

- Target specific problem toxins for elimination, mercury, etc., and set rates and dates (G)
- Permanent and complete eradication of pollutants into waste stream by laws and product components (E)

Materials Processing and Management

- Increase use of compost and eliminate use of some chemicals (E)
- Reduce toxins through waste incineration rather than landfills one-fourth of emissions or mess (SW)

Full Cost Accounting

- Develop a system whereby the 'true' womb-to-tomb costs of pesticides are reflected in the product costs (E)

RESEARCH AND DEVELOPMENT

Within 10 years, government economic development policies will support research and investment in technologies that support waste and pollution reduction, including recycling processes, energy recovery, and transportation solutions.

MILESTONES

- Research and development of recycling processes and recycled/reused packaging (SW) 2001
- Government economic development policies support research and investment in bio-based technologies (G) 2003
- Alternative fuels - reduce transportation costs (SW) 2006
- Ways to reduce amount of end products waste that cannot be recycled (E) 2011
- Develop pollution free waste-to-energy technology (for those wastes not recycled/recovered) (E) 2041

STRATEGIES

Full Cost Accounting

- Support additional research into the costs benefits of compost use, i.e., benefits of avoiding fertilizers, soil benefits, water conservation (G)

Research

- Research and development combining efforts between government, business, and citizens (E)

Grants

- Make grants available to businesses for innovative new sustainable products or practices (B)

Incentives and Disincentives

- 'Incentivize' market development for recyclables (B)
- Establish government incentivized research and development to aid jump start business to develop 'womb-to-tomb' produce development strategies (E)

FUNDING FOR GOVERNMENT SOLID WASTE PROGRAMS (ISSUE PAPER 4)

[Selected but not revised due to lack of time in Meeting 4]

Within 10 years, funding mechanisms for local government will be in place at adequate levels to implement and evaluate goals outlined in state and local solid waste plans. Funding will be diversified and no longer be dependent on the generation of waste.

MILESTONES

- Finance DOE and local government waste reduction and recycling grants through stable, appropriate mechanisms (E) 2001
- Reduction programs at local governmental levels funded adequately (E) 2003
- Financing mechanisms for local governments for waste reduction and recycling that are not dependent of garbage (E) 2003
- Disconnect solid waste funding for programs from tipping fees at landfills (E) 2003

- More technical resources at Ecology (G) 2003
- Funding and staff time devoted to developing infrastructure and end markets to efficiently move waste for reuse and places to use them (G) 2003
- Solid waste program services and systems financing is stable and not based on disposal fees. Recycling and waste reduction no longer undermine funding. (G) 2006
- Adequate funding available for implementation and evaluation of all goals outlines in the final state solid waste plan (C) 2006
- Non-disposal programs are no longer funded with tip fees (G) 2006
- Counties, cities, and hauling industry jointly support legislation to diversify solid waste funding for local government solid waste management (G) 2006
- Local toxics funds are used 100 percent by local government (G) 2006
- Adequate resources for the solid waste system are secure and allow for flexibility in addressing the changing characteristics of solid waste (Mtg. 4)

STRATEGIES

Funding for Government Programs

- Establish a non-disposal funding source, such as a solid waste collection fee, to fund recycling and waste prevention programs and other non-disposal costs (G)
- Adequately fund government oversight of landfill design, monitoring, inspection, and enforcement through a portion of tipping fees (G)
- Finance Ecology and local waste reduction and recycling grants through stable appropriate mechanism (E)
- Develop financing to incorporate a planning and development strategy to reduce, reuse and recycle (E)

Financial Incentives and Disincentives

- Charge manufacturers for handling their products through public facilities, such as pesticides, electronics, and tires (G)

Comments and Concerns

- Is independence between funding and waste generation always good? (B)

WASTE DIVERSION (ISSUE PAPER 5)

[Selected but not revised due to lack of time in Meeting 4]

Within 10 years, all compostable organic, construction, and demolition wastes will be diverted from the municipal solid waste stream, and composting facilities will be built. State and local agencies will support and utilize recovered materials in development activities. And within 40 years, economical material separation and refining processes will be used to maximize recovery for each waste stream so no portion of the state's waste is disposed without being processed to pull out recoverable materials.

MILESTONES

- Grass clippings/leaves should be banned from landfills and burning (C) 2001
- Develop yard waste facilities, composting; facilitate siting (SW) 2001
- Local government implements requirements for compost use in new developments (G) 2003
- Residential food waste collection is implemented county-wide (G) 2003
- State DOT adopts/incorporates specs for use of recycled/composted material in state highway projects (G) 2003
- Ban yard debris from landfills (E) 2003
- Beneficial use - not organics disposal (E) 2006
- All compostable organics are diverted from MSW (G) 2006
- All public trash receptacles required to provide recycling (G) 2006
- All CDL is diverted from the disposal waste stream (G) 2006
- 100 percent improvement divert end products to beneficial uses other than disposal (E) 2011
- Per capita disposal is 50 percent of 2001 level (G) 2011
- 100 percent utilization of resources present in waste - raw materials, energy (G) 2011
- 100 percent of generated animal/human waste reused as environmentally safe fertilizer/soil amendments (finding proper markets) (G) 2011
- Managing waste is part of a comprehensive resource conservation program, practiced/implemented by all businesses (B) 2021
- No portion of the state's waste stream is disposed without being processed to pull out recoverable recyclables (G) 2041

- Maximum economical recovery method for each waste stream, recycle to remanufacture, incinerate to energy recovery, compost to soil amendment (G) 2041
- Material separation and refining process can economically handle all material (SW) 2041

STRATEGIES

Materials Processing and Management

- All construction and demolition materials to be handled through MRFs like recovery one, set up program to bring this about (G)
- Incorporate composing of agriculture waste and yard debris (E)
- Develop means to properly utilize organic wastes and other means to use the rest of the waste from the waste stream (E)
- Co-collection of agriculture and livestock waste and yard debris (E)

Procurement

- Require LEED certification or similar sustainable building effort on all state funded construction projects (G)
- Require use of compost with new development (E)
- Require waste management plan for all state funded construction projects (G)

Regulatory Action

- Ban commercial cardboard and office paper from landfills (E)
- Ban yard debris from landfills (E)

Financial Incentives and Disincentives

- Establish an incentive based system whereby items that can be recycled are not landfilled. This can include higher fees imposed on those who choose not to comply (E)
- Cost for recycled materials are less than raw materials (B)

WASTE HANDLING FACILITIES (ISSUE PAPER 5)

[Selected but not revised due to lack of time in Meeting 4]

Within 10 years, solid waste collection and facilities will have the capacity to process all wastes for maximum recovery of energy and material, and privatization will be accepted. Within 60 years, materials will move directly to industry for use in manufacturing.

MILESTONES

- Unified collection of residential, wet, dry, CD to central processing process for value energy (SW) 2011
- Have private industry receive all solid waste to process, recycle, and dispose of residual (SW) 2011
- Dirty MRF economical (SW) 2041
- "Flushed" solid waste to factory for materials (SW) 2061
- Municipal solid waste disposal systems including facilities are community-friendly and address transportation impacts (Mtg. 4)
- Members of the public perceive they are treated fairly (Mtg. 4)

STRATEGIES

Materials Processing and Management

- Public sector invests in MRFs and compost facilities with same tools and fervor as landfills and transfer stations (G)
- Facilities receiving materials should handle them such that a minimal residual leaves for landfilling (G)
- "Within 60 years, materials move directly to industry." 100 percent utilization of resources present in waste and raw materials - energy through use of municipal solid waste incineration, while having clean air. Produce energy; reuse products created in process - hydrochloric acid, gypsum and bottom ash/slag; filter out metals / non metals for recycling. Build on German incineration technology (SW)
- Develop central collection facilities by private industry (E)
- Facilities built using public sector assistance, tax incentives, funds sorting whatever for full material recovery, no more garbage transfer stations (G)

RECYCLING (ISSUE PAPER 11)

[Selected but not revised due to lack of time in Meeting 4]

Within the next year, a consistent definition of recycling and effective rate measurement will be developed. Within 10 years, mandates for recycling will consider the markets and facilities to support such rates, and needed recycling and composting facilities will be built. Recycling services and their efficiency will be increased statewide, reaching a 50 percent recycling rate in 10 years and a 75 percent rate in 20 years. Within 30 years, more recyclables will be collected than solid waste.

MILESTONES

- How do we build community and political support back into recycling? (E) 2001
- Consistent and effective recycling rate measurement (E) 2001
- 'Incentivize' recycling (SW) 2001
- Define recycling (SW) 2001
- Do not mandate recycling without a market and facilities (SW) 2001
- Look for avenues to recycle a 100 percent improvement of wastes generated back into production of new products (E) 2003
- Recycling services are readily available in 100 percent of the state (E) 2003
- Build needed recycling and composting facilities (E) 2003
- Increase collection efficiencies for solid waste and recycling (E) 2003
- Recycling services are readily available in 100 percent of the state (E) 2006
- Recycling rates are up to 80 percent for all recyclables (C) 2006
- Increase number of waste streams that can be recycled (E) 2006
- 50 percent recycling rate (E) 2011
- Businesses maximize their potential to recycle - 80 percent of readily recyclable materials are recycled (B) 2011
- 75 percent recycling rate (E) 2021
- 100 percent mandate recycling of waste (E) 2031
- Pick up more recycling than solid waste (SW) 2031

STRATEGIES

Partnerships

- Increased cooperation with waste and recycling haulers (B)

Financial Incentives and Disincentives

- Provide financial incentives to local government to collect and divert all organics from disposal (G)
- Public sector investment in needed recycling facilities and compost with effort similar to what is done for landfills and transfer stations (G)
- Make inorganic products less cost-effective than the recycled organic alternatives (E)
- Make recycling cost effective and convenient (E)
- Convenient and affordable recycling services available to all businesses (E)

Regulatory Action

- Require all generators to recycle - including businesses. Develop program to build support for bringing this about (G)
- Set recycling goals for all waste streams not just municipal solid waste (G)
- Mandatory participation for waste studies in the state (B)

Procurement Standards

- Require job-site recycling / reuse on all state funded building projects (E)

MILESTONE TOPICS NOT INCLUDED IN THE KEY 13

STATE AND LOCAL SOLID WASTE PLANNING (ISSUE PAPER 2)

Within the next year, consistent, clear definitions and measures for solid waste, recycling and reuse will be developed and desired outcomes set for business and agencies statewide. Planning activities will engage community, industry, and government to increase cooperation. In addition, rulemaking processes will be developed to expedite business and consumer use of best management practices and increase political support. Within the next 20 years, regulations and policies will be updated as waste streams change.

MILESTONES

- Secure more community input in planning process (C) 2001
- Establish consistent baseline from which to measure milestones (C) 2001
- Bring industry to the table (E) 2001
- Develop expedited process, from three years to one, to change statewide rulemaking (E) 2001
- Personalized waste reports are produced by waste haulers (B) 2001
- Establish clear and consistent definition and measure for solid waste, recycling, reuse (SW) 2001
- Measure waste generation (SW) 2001
- Best management practices that incorporate all major environmental laws related to waste management are clearly defined and accessible to business (B) 2001
- Government interagency cooperation instead of competition (SW) 2001
- Define criteria for converting SWF to commodity assets (C) 2003
- Develop timeline after closure for conversion to C/A (C) 2003
- Get funding for conversion activities included in solid waste budget and political buy-off by county executive, Metro King County Council (C) 2003
- Political buy-off: Department of Natural Resources, Health Department, County Executive, and Metro King County Council (C) 2003
- Define various waste streams (to be consistent) (E) 2003
- Develop consistent trading mechanisms (E) 2003
- Provide consistent and sufficient funding for solid waste programs (E) 2003
- Revise composting regulations (E) 2003
- Regulatory clarity (E) 2003
- Coordination amongst all the various permitting/monitoring agencies (i.e., allowable uses combined with inspecting agencies) (G) 2003
- Planning services coordinating with local health districts (G) 2003
- No LF BERM laws (G) 2003
- Have government govern only. Business runs plants and process (SW) 2003
- Work with UTC to attain desired results (SW) 2003
- Have regulations say 'yes' instead of 'no' (SW) 2003
- Identify desired outcomes and establish measurements/indicators for the whole state - across agencies, at all levels ("shared vision") (E) 2003
- All businesses and governmental institutions must complete and report to public "environmental report cards" annually (B) 2006
- Business/government/organizations must complete annual "environmental report card" and make it available to the public (B) 2006
- Ecology, local governments, and the private sector have agreed on and use common definitions and methods of measuring waste management practices (G) 2006
- De-regulate UTC (SW) 2006
- Update solid waste regulations and policies as waste stream changes (G) 2021
- Government no longer has a role in promoting recycling, waste reduction, or resource conservation (G) 2061
- State and local plans identify what needs to happen to move toward sustainability and invites increased responsibility from the broader community in an effort to address larger resource and energy conservation issues (Mtg. 4)

STRATEGIES

Materials Management Systems

- State and local plans must address capacity needs, transport distances, etc. for composting, recyclables processing, construction and demolition materials, etc. Must address need whether provided by public or private sector (G)

Full Cost Accounting

- Include in solid waste budgets cost of post closure conversion of landfills (CC)
- Establish system for public environmental reporting and report cards by all businesses and governments on an annual basis (E)

Partnerships

- Coordinate landfill closure plans with Parks Department needs and integrate planning (CC)
- Plan to reduce waste streams involving all parties (E)

Education

- Develop public awareness of potential public asset value of closed landfills (CC)
- Gain political acceptance of converting closed landfills to public assets (CC)
- Emphasize importance of agriculture waste in urban areas (E)

LANDFILLING AND INCINERATION (ISSUE PAPER 9)

Within 10 years, 100 percent of landfills will be identified, assessed, cleaned up with the necessary funding in place to accomplish this. Best management practices will be established for energy recovery from disposed waste, including methane co-generation options. Closed landfills will be considered community assets. Within 20 years, cost effective landfill mining and zero discharge will be a reality.

MILESTONES

- Get goal of landfill to conversion to community assets incorporated in SWD Comp Plan for King County (C) 2001
- Get goal of landfill conversion to community asset incorporated in state solid waste plan update (C) 2001
- More landfill gas energy recovery projects (E) 2001
- 100 percent of closed landfills identified (E) 2003
- 100 percent of closed landfills assessed (E) 2003
- 100 percent of closed/abandoned landfills have been identified and assessed (E) 2003
- Encourage energy recovery, waste-to-energy, bioreactor landfills (G) 2003
- Money to identify, assess, and clean up abandoned/closed landfills (E) 2003
- Execute conversions plans on closed landfills (C) 2006
- Convert closed landfills to community assets (C) 2006
- Landfill mining (E) 2006
- 100 percent of closed landfills with environmental problems have undergone cleanup (E) 2006
- Methane co-generation of electricity at landfills (SW) 2006
- 80 percent use of LFG (methane) for production of energy (E) 2006
- Develop Cedar Hills closure plan (C) 2011
- 100 percent use of landfills in areas that are not in use for wildlife or sensitive to wildlife (E) 2011
- All closed/abandon landfills are located and mapped; management plans for each are developed; funding is available for management (G) 2011
- Landfill BMPs include details on how to recover energy from disposed waste (G) 2011
- Execute closure plan on Cedar Hills (C) 2021
- 100 percent of closed/abandoned landfills with environmental problems have been cleaned up (E) 2021
- Cedar Hills on line as community resource (C) 2021
- Cost effective landfill mining is a reality (G) 2021
- Landfills with zero discharge (G) 2021
- 100 percent of previous landfills that have environmental contamination are cleaned up (E) 2051
- Mining landfills (SW) 2061
- Eliminate landfills - 80 percent of the shift in industry to recycling (E) 2061

STRATEGIES

Funding for Government Programs

- Develop a closure fund to address pollution problems from abandoned landfills. A portion of all current tipping fees will fund the account (G)
- Clean up and utilize assets of landfills (E)

Regulatory Action

- Push to close Cedar Hills before estimated 2012 and begin clean up (SW)
- Adopt a goal of minimal disposal of residuals only no mixed materials landfilling or disposal (G)
- Elimination of landfills - shift to prevention and recycling, what is left: incineration

Financial Incentives and Disincentives

- Support a federal tax credit for landfill gas energy recovery projects (G)

Research

- Identify, map and assess, and clean up all existing closed landfills, develop a program to accomplish this (G)

Grants

- Identify and assess closed abandoned landfills, prioritize need in state solid waste plan, state fund local Health Departments to perform assessments through solid waste enforcement grants and funds from tipping fees (G)

Materials Processing and Management

- Establish a system in which the goals include not using landfills or export of waste products (E)

ROLES AND AUTHORITIES (ISSUE PAPER 2)

Within 3 years, privatization of solid waste operations will be an option.

MILESTONES

- Privatize solid waste operations (SW) 2003

STRATEGIES

Regulatory Action

- Ecology to take stronger hand in bringing about product stewardship, toxicity reduction and increased recycling (G)
- Allow counties contract authority for garbage recycling (G)
- Run recycling by private industry but mandate all recycling avenues (E)

New Data and Measurement Tools

- Require state and local analysis of facilities needed to handle composting and recyclables with distance and tonnage analysis (G)

Incentives and Disincentives

- County authority for incentive rates (E)

LITTER AND ILLEGAL DUMPING (ISSUE PAPER 3)

Within 10 years, litter and illegal dumping will be addresses through increased enforcement. Industry will also play a role through a reduction in disposable packaging.

MILESTONES

- Emphasis by law enforcement of littering and illegal dumping laws (G) 2003
- Abandoned junk vehicles are quickly removed and cost-effectively put into the recycling waste stream (G) 2003
- Higher litter fines statewide. Increased law enforcement and agency enforcement of littering (G) 2003
- Reduce amount of disposable food/drink packaging by 50 percent to help curb litter problem (E) 2006

STRATEGIES

Regulatory Action

- Illegal dumping - lobby legislature to increase penalties for illegal dumping improper disposal (G)
- Develop legislation to reduce disposable items and larger fines for littering (E)

Partnerships

- Create method for citizens to report illegal dumping where consequences result same idea as reporting carpool violation (G)

Education

- Increase public awareness to cost of illegal dumping, public and private property equals tax payer expense (G)

Financial Incentives and Disincentives

- Balance increased disposal fees designed to inhibit waste disposal with increased enforcement programs to inhibit illegal dumping (G)

Incentives and Disincentives

- Encourage the market incentives and education of public that all 'disposable' food and drink packaging be produced from recycled products and be recyclable themselves (E)

APPENDIX D SOUTHWEST - Vancouver

REGIONAL RECOMMENDATIONS AND IDEAS FOR INCLUSION IN THE STATE SOLID WASTE PLAN REVISION

INTRODUCTION

This appendix contains a summary of the outcomes of all four meetings in the Southwest Region (Vancouver). This is the information that was used for the development of this statewide round table meeting report. It reflects the work done in Meeting 4 by the regional round table participants in reviewing a draft vision and the milestones to accomplish that vision. In addition, the appendix includes a listing of all the ideas and recommendations developed in Meetings 2 and 3, which have not been altered. The appendix has three sections:

1) Section 1: Regionally Recommended Vision. This section reflects the results of Meeting 4 on creating a regionally recommended vision statement.

2) Section 2: Key Milestone (Goal) Statements. This section includes a summary of common perspectives on key milestone summary statements for the Southwest Region (Vancouver) meetings.

3) Section 3: All Milestone Summary Statements, Milestones, and Strategies. This section includes all milestone summary statements, all milestones, and all strategies generated in the Southwest Region (Vancouver) meetings.

SECTION 1: REGIONALLY RECOMMENDED VISION

Below is a draft vision for the state solid waste plan that reaches beyond 20 years. The original draft version, published in *Issues Identification: Issues for Consideration and Discussion,* Ecology Publication #01-07-001, was tailored to include feedback from the first three Southwest Region round table meetings. Participants in Meeting 4 explored support for this regionally tailored vision. The outcome of their work is reflected in the draft vision below. Comments and ideas that came from individuals, not the group as a whole, are noted below the vision.

SOUTHWEST (VANCOUVER) REGIONALLY RECOMMENDED VISION

A sustainable solid waste system exists that supports equally the economic, environmental, and health and social well-being of the diverse regions of the state. A unified approach is taken, with increasing emphasis on resource and energy conservation, pollution prevention, waste reduction, resource productivity and material reuse. The efforts to protect the environment, community health, and to promote economic vitality have merged.

BUSINESSES balance material and energy use with practices that replenish and sustain natural resources (environmental capital), recognizing that such stewardship is the basis for their long-term survival and profit. Industry recognizes their role in preventing waste in product and packaging development. Material reuse and recycling by private enterprise, and small business is supported.

INDIVIDUALS recognize their responsibility to support sustainability; they demand, are provided with, and choose goods and services with the lowest life-cycle impacts on the environment.

GOVERNMENT regulatory and economic policies establish a consistent approach to providing incentives to achieve and maintain sustainability. Government uses an integrated approach to solid waste policies and leads by example.

COMMUNITIES create and sustain local systems that support growth within the limits of the environmental carrying capacity. Regions work together with individual communities to address solid waste issues. Efforts to promote economic development address community health and environmental protection. Public health and education are emphasized as the foundation for addressing solid waste issues.

ADDITIONAL INDIVIDUAL COMMENTS

Opening Paragraph
- Recognition of current system components such as landfills is needed if individual items are going to be listed.
- Add 'natural systems,' add 'closed loop systems without waste,' add 'reduction of resource use and increase of resource reuse.'

Business
- Define environmental capital.
- Do terms need to be included in a glossary?
- Should 'life cycle' be in this section?

Individuals
- Add 'best life-cycle impact,' or 'highest resource efficiency.'

SECTION 2: KEY MILESTONE (GOAL) STATEMENTS

At the final meeting in June, Meeting 4, participants identified common perspectives on key issues. They selected 12 of the most important issue topic headings out of 17. Participants worked together to revise the summary statements most important to them to better reflect the goals they see as critical to the state solid waste plan.

The following are the milestone summary statements for the 12 topic headings selected and revised by participants. Any comments and ideas that came from individual participants and not the group as a whole are noted below the statement. NOTE: of these 12 most important topics, the last three below were not revised by participants due to lack of time in Meeting 4. They are nonetheless included as they were selected by the participants and reflects discussion by participants in Meeting 2.

SOUTHWEST REGION'S 12 KEY MILESTONE TOPICS AND SUMMARY STATEMENTS

WASTE DIVERSION (ISSUE PAPER 5)

Within 10 years, there will be less waste produced per generator, increased recycling and diversion of waste. There will also be more effective hazardous waste management. There will be a system in place that allows residential, commercial, and industrial diversion/recycling to become more efficient. Most yard waste and wood debris will be diverted from landfills to recycling. Composting of post-consumer food waste will be practical, with regular "compostables" collection. Funding and education to promote composting will result in a 50 percent reduction of organic waste going into landfills. Within 30 years, energy will be recovered from solid waste prior to final disposal.

Additional Individual Comments
- What does diversion mean?
- There needs to be a continued emphasis on recycling.
- This title may not fit the goals.

REDUCTION OF TOXINS/ ENVIRONMENTAL IMPACTS

Within 10 years, toxins entering landfills and energy recovery facilities will be reduced by 90 percent. Also, household, business, waste water, storm water, and air toxins will be substantially reduced from existing levels. Waste characterization studies will be done for toxins every 5 years.

ROLES AND AUTHORITIES (ISSUE PAPER 2)

Within 10 years, barriers to solid waste handling across multiple jurisdictions will be reduced. Government regulation will be consistent and coordinated (for example, by exploring giving more authority to counties) to allow for 'one stop shopping' for the recycling and waste industry, and business.

RECYCLING (ISSUE PAPER 11)

Within 10 years, publicly-funded institutions will be required to participate in recycling programs available within their area (if available in their area). Recycling operators will employ better technology and more sustainable practices. Incentives such as streamlined permit processes in place will result in more recycling facilities in our communities. Within 30 years, demand for all traditional recycling commodities will be high and less than 10 percent total residuals will require expensive disposal. Problematic materials such as glass, tires, electronics, petroleum, and organic liquids recycling opportunities will exist statewide.

ADDRESSING SPECIAL WASTES (ISSUE PAPER 1)

Within 10 years, convenient and inexpensive systems will be in place for diverting household hazardous materials statewide. Incentives will be in place to reduce/deter the generation of these wastes. There will be facilities to treat or recycle various "problem" wastes, e.g., medical, tires, industrial wastes, and heavy metals. All infectious biomedical waste will be treated and/or recycled.

CHANGE BEHAVIOR AND ATTITUDES

Government and media will cooperate to increase public awareness about solid waste solutions that reduce, reuse, and recycle materials immediately and ongoing. Within 10 years, education regarding sustainable solid waste will occur at all levels and be fully integrated into 50 percent of school districts' curricula. All government facilities such as schools, prisons, and institutions will integrate principles of sustainability into operational structures. A community education plan will be implemented to inform the public of product stewardship, waste reduction methods, and recycling practices, and communities will work with industry to change the current culture of packaging. Society will be less focused on consumerism and consumer products will be "low impact."

Additional Individual Comment

- 50 percent of food consumed should be produced locally, which will reduce global dependency.

PRODUCT STEWARDSHIP (ISSUE PAPER 7)

Within 10 years, voluntary product stewardship activities will be implemented by more and more companies within key industries. Government will provide incentives and use regulations to limit packaging and chemicals, increase take back programs, upgrade durable goods and utilize recyclable packaging materials. Within this 10 year period, feasible options will be established that provide for product stewardship strategies such as repair and/or upgrade of durable goods, e.g., autos and electronics. Within 30 years, product stewardship will be the norm and regulations will be adopted. At least 50 to 75 percent or more of products will be repairable and/or upgradeable and reusable.

Additional Individual Comments

- Measurable outcomes may be difficult to set and track.
- The long string of products listed in separate sentences should be put together.
- There should be a tax structure that puts surcharge on product at the time of sale (a strategy).
- Government should recommend companies on the 'good list' (i.e., those doing it).
- There should first be incentives and then exultation to push further.
- There should not be percentages, at least in the short term; they limit the possibilities. Ultimately we want 100 percent, zero waste.
- Add 'Within 60 years durable products and packaging will be in a closed loop system.' Zero waste for durable products is possible.
- Do we want measurable outcomes? Yes, but this is difficult to get to.

WASTE PREVENTION (ISSUE PAPER 6)

Waste generation rates will be reduced. Wastes that are generated can be handled by alternative processes that utilize the materials for other production activities, and the net environmental benefit is maximized. Within 10 years, 'zero waste' will be defined in a realistic and acceptable manner. Within 20 years, product packaging, including fast food, will be re-useable. Within 30 years, non-essential packaging will be reduced by 80 percent.

Additional Individual Comments

- If it is recycled then it is not wasted; it is a raw material. If it is not a raw material then we need to find a way to avoid it. Don't generate it in the first place, but if you do it needs to be a raw material for another product/process.
- Sometimes generating a waste is more environmentally beneficial. A net environmental benefit may be realized.

ACTUAL / COMPLETE COSTS OF SOLID WASTE (ISSUE PAPER 10)

Information on the true costs of solid waste will be provided to the public through education and labeling. (*The following text was not revised due to lack of time in Meeting 4)* Virgin material subsidies will be removed and environmental costs will be added in. 50 percent of the costs of waste disposal of products will be internalized and included in the prices of products. Within 30 years, 75 percent of the costs of waste disposal of products will be internalized and include in the prices of products. Within 60 years ,100 percent of the costs of waste disposal of products will be internalized and included into the prices of products.

Additional Individual Comments

- Information about the true cost should be included inside of actually charging the true cost.
- How far upstream these goals should reach? How much of a role should there be in product pricing?

RESEARCH & DEVELOPMENT

[Selected but not revised due to lack of time in Meeting 4]

Within 10 years, research programs will be in place for generating new products from what are currently 'problem' solid waste items. There will be research and civic involvement in recycled product development. Within 30 years, government will conduct research to help businesses develop non-hazardous materials that work as well or better than chemicals now being used.

LANDFILLING AND INCINERATION (ISSUE PAPER 9)

[Selected but not revised due to lack of time in Meeting 4]

Within 10 years, 50 percent of abandoned landfills will be identified and cleaned up. No new landfills will be created and abandoned landfills will be mined for resources. Within 30 years, 90 percent of abandoned landfills will be cleaned up. Within 60 years, landfills will be eliminated and solid waste will be converted to building and construction materials.

CONSUMER AND INDUSTRY INCENTIVES

[*Selected but not revised due to lack of time in Meeting 4*]

Within 10 years, there will be more financial incentives for businesses and homeowners to recycle. There will be tax incentives (rewards) to produce low-impact products and there will be incentives for local community to minimize the impact of waste on ground water.

SECTION 3: ALL MILESTONE SUMMARY STATEMENTS, MILESTONES, AND STRATEGIES

During Meeting 2, participants drafted milestones, or goals along the way, to a more sustainable approach to solid waste in Washington state for both the long-range vision and the current system needs. The milestones serve as landmarks that help measure progress toward the future solid waste system envisioned. The milestones were then grouped under topic headings by the facilitators and the themes were captured in summary statements.

The following is a compilation of all milestone summary statements (both the top 12 and also the others that did not receive as much emphasis), all individual milestones, and all strategies generated in the Southwest Region (Vancouver) meetings. It is a compilation of the meeting summaries from Meetings 2, 3, and 4.

The milestones are grouped by topic. If the topic is related to an Issue Paper *Identification: Issues for Consideration and Discussion,* Ecology Publication #01-07-001 the source is noted. The milestone summary statements at the beginning of each topic group are the same ones used in the above section. These summary statements are followed by all of the individual milestone ideas raised.

In Meeting 3, participants identified specific actions or strategies they think would best accomplish the milestones identified in Meeting 2. The strategies have been merged beneath the milestone topic heading under which they were posted.

As a guide for the reader, each milestone includes in parentheses the initial of the breakout group in which it was created it and the year it was placed on the timeline. The initials for the sector breakout groups stand for the following:

(B) = Business
(C) = Community & Civic Groups
(E) = Environment
(G) = Government
(SW) = Solid Waste Industry

NOTE: These sector groups are not intended to be representative of the sectors themselves, but merely provided an opportunity for people to propose ideas from various perspectives.

SOUTHWEST REGION'S MILESTONES & STRATEGIES

12 KEY MILESTONE TOPICS

WASTE DIVERSION (ISSUE PAPER 5)

Within 10 years, there will be less waste produced per generator, increased recycling and diversion of waste. There will also be more effective hazardous waste management. There will be a system in place that allows residential, commercial, and industrial diversion/recycling to become more efficient. Most yard waste and wood debris will be diverted from landfills to recycling. Composting of post-consumer food waste will be practical, with regular "compostables" collection. Funding and education to promote composting will result in a 50 percent reduction of organic waste going into landfills. Within 30 years, energy will be recovered from solid waste prior to final disposal.

MILESTONES

- Less emphasis on recycling and more on waste reduction and diversion. Increase emphasis on hazardous waste management (SW) 2001
- Educate, fund, and promote composting to reduce solid waste going into landfill by 25 percent (G) 2003
- Regulatory mandatory diversion/recycling for residential, commercial, industrial. A system in place that makes it efficient (SW) 2003
- Educate, fund, and promote composting to reduce solid waste going into landfill by 25 percent (G) 2003
- All vehicles run on bio-diesel (B) 2006
- Neighborhood composting implemented within community to decrease residential solid waste at landfill by 20 percent (food and newsprint compostable) (G) 2006
- Clean co-generation plants (SW) 2006

- 100 percent of yard waste and wood debris diverted from landfill to recycling (SW) 2006
- Most yard debris composted on-site/at home; remainder is collected efficiently, bi-weekly (C) 2006
- If it can be recycled at a cost lower than "true cost" it should be diverted over next 10 years - some each year (G) 2011
- Composting of post-consumer food waste becomes widely practical, weekly "compostables" collection in monthly trash collection (C) 2011
- Energy recovered from all solid waste prior to final disposal (B) 2021
- Local distribution of unpackaged food that community markets (C) 2031

STRATEGIES

Partnerships

- Work with industry to change packaging culture (G)

Incentives and Disincentives

- Composting food waste - incentive for engineering of truly compostable bags for collection (G)
- Create incentives for businesses to be in the composting business (B)

Materials Processing and Management

- Neighborhood composting good idea (G)
- Paper - film plastic use as a fuel 20 to 40 percent reduction (G)
- Vermacomposting at restaurant with regular pick up service, also school cafeterias (CC)
- Statewide program to provide public with composting bins at low cost (B)
- Not try to compost yard waste on site - require higher environmental standards at regional compost facilities (SW)
- What about scavenging program, natural cycles systems all include scavenging (eating what is left over, lion kills prey eats all the way down to bugs. Folks can use what is now trashed)

Regulatory Action

- Subscription to yard debris service is mandatory by city ordinance (G)
- Require all fiber packaging to be 100 percent recycled with 30 percent post consumer content (SW)
- Ban yard debris food wastes from landfills (SW)

Producer Responsibility

- Return to milk containers being made from glass and re-used (G)

Consumerism

- Waste equals stuff equals greed. We need to learn to live with less, need to deal with billions of undeveloped nations populations trying to attain 'west' income level. By helping the needy you help yourself (G)

REDUCTION OF TOXINS/ ENVIRONMENTAL IMPACTS

Within 10 years, toxins entering landfills and energy recovery facilities will be reduced by 90 percent. Also, household, business, waste water, storm water, and air toxins will be substantially reduced from existing levels. Waste characterization studies will be done for toxins every 5 years.

MILESTONES

- Government and business funded research and assistance center for state-wide waste and toxics reduction (B) 2003
- Develop an economic plan to make local industry accountable for the cost of environmental impact (C) 2003
- Figure out way to measure reduction of toxins in chemical products (G) 2003
- Persistent bio-accumulation toxins are eliminated from new product manufacturing (C) 2006
- Pesticides may only be purchased by licensed professionals and their use is as tightly monitored as narcotics (C) 2006
- Reduction in CO2 and other greenhouse gas emissions (SW) 2006
- Waste characterization for toxins are done regionally every 5 years by state (G) 2006
- Volumes of toxic materials found in typical homes and businesses are reduced by 90 percent over volumes in 2000 (C) 2011
- Toxins entering landfills are reduced by 90 percent (SW) 2011
- Reduction of 90 percent of toxins landfilled (SW) 2011
- Toxins in products are reduced by 50 percent (G) 2021
- Elimination of production of PBTs (SW) 2021

- Toxins in products are reduced by 75 percent. Toxins in garbage, wastewater, and storm water are reduced by 50 percent. (G) 2041
- Elimination of green house gas emissions (SW) 2041
- Toxins in products are reduced by 85 percent (G) 2061
- Toxins in garbage, wastewater, and storm water are reduced by 75 percent (G) 2061

STRATEGIES

Producer Responsibility

- Manufacturers pride themselves on producing fertilizers with very low levels of metals and other contaminants (G)
- Advertise honestly, promote low toxicity in products and consumers buy the less toxic products (G)

Regulatory Action

- Reduction of toxins, obtain state endorsement and funding for phasing out PBTs as proposed by PBT study (G)
- Require all products to have a list of ingredients on label including inerts (G)
- Subject new pesticides to tougher FDA approval standards than new medicines, then start reviewing existing pesticides (CC)
- Federal law mandating auto companies to produce percentages of hybrid or 100 percent electric or fuel cell powered cars

New Data and Measurement Tools

- Reduction of toxins, establish regular waste characterization study to be done that measures changes in toxins in the waste streams (solid, storm, wastewater) (G)
- Reduction of toxins, establish regular study that tells how much hazardous materials are sold, used by homeowners and businesses. Estimate how much becomes waste, is lost, etc. (G)

Materials Processing and Management

- Reduction of toxins, re-refine and use as a fuel, and take out of environment (G)
- Oil recycling containers to collect auto fluids, paint, batteries, and alter toxins one time use (G)

Partnerships

- Reduction of toxins, work on strategy that partners with industry that will reduce the amount of hazardous chemicals in consumer products (G)

Financial Incentives and Disincentives

- Toxicity tax or products surcharge to make market price reflect persistence in environment (CC)
- Add surcharges or taxes to toxic products that households and businesses buy the more toxic the larger the surcharge (B)

ROLES AND AUTHORITIES (ISSUE PAPER 2)

Within 10 years, barriers to solid waste handling across multiple jurisdictions will be reduced. Government regulation will be consistent and coordinated (for example, by exploring giving more authority to counties) to allow for 'one stop shopping' for the recycling and waste industry, and business.

MILESTONES

- Freedom to implement charges (implement accounting practices) with governmental approval to cover hazardous waste disposal costs (B) 2001
- Program to bring government and recycling community together - dispute methods (G) 2001
- Authority for hauling is granted to counties (G) 2001
- Flow control and FAAAA issues are resolved (G) 2001
- City of Vancouver should listen to recyclers (B) 2001
- Give more authority to county government, e.g., collection contracts, facility permitting (G) 2001
- Coordination of government regulation, one stop shopping for recycling waste industry and business (B) 2001
- Legal resolution of property, flow control, recyclables vs. solid waste issues (G) 2003
- Even the playing field county-by-county. Present approach county-oriented, while solid waste handling regional in approach. Remove barriers to solid waste handling across multiple jurisdictions (SW) 2003
- Realistic and comprehensive regulatory infrastructure for re-use of organic materials (agriculture waste, food processing wastes) (SW) 2003
- Legislature amends RCW 36 to allow counties to contract solid waste collection (G) 2006

- Ecology and the WUTC adopt a definition for "recycling" or "recyclable materials" (G) 2006
- Environmental equity becomes a qualifying factor for "most favored nation" trading status (C) 2031

STRATEGIES

Regulatory Action

- Legislature amends 2CW 36 allows county contract authority over garbage (G)
- Ecology and WUTC define recycling and recyclable materials (G)
- Establish consistent statewide standards counties administer and tweak only for land use type issues (SW)

Partnerships

- Ecology and WUTC work with local governments to develop definition (G)
- Counties establish trusting relationship with UTC by frequent consultation (G)

Comments and Concerns

- Key to removal of barriers is for state to establish consistent approach to solid waste handlings, counties can implement above (SW)
- One stop web site with excellent search engine (CC)

RECYCLING (ISSUE PAPER 11)

Within 10 years, publicly-funded institutions will be required to participate in recycling programs available within their area (if available in their area). Recycling operators will employ better technology and more sustainable practices. Incentives such as streamlined permit processes in place will result in more recycling facilities in our communities. Within 30 years, demand for all traditional recycling commodities will be high and less than 10 percent total residuals will require expensive disposal. Problematic materials such as glass, tires, electronics, petroleum, and organic liquids recycling opportunities will exist statewide.

MILESTONES

- Recycling coordinator should do resource organization for recyclers (B) 2001
- Increase of source. Grass roots separated recyclables and waste for home owner and business (bigger incentive) (SW) 2001
- State funded institutions required to recycle (if available in their area) - i.e., prisons, hospitals, shelters funded by state grants, etc. (SW) 2001
- Require schools to recycle if available in their area - would save them money (SW) 2001
- State refund for aluminum can recycling (like Oregon) and glass bottles - state deposit system (G) 2003
- Recycling tax credit for businesses. Issue tax credit for businesses that achieve recycling and re-use goals (SW) 2003
- Encourage recycling facilities with fewer regulations but still having necessary regulations and accountability (G) 2003
- Recycling operators should be encouraged to employ better technology and more sustainable practices (not all recycling is equally sustainable). Better forms or products (SW) 2003
- Have more return opportunities for recycling or diversion at point of purchase (SW) 2006
- Ban on regulatory disposal of recyclable materials (SW) 2006
- Recycle 50 percent metals from electronics manufacturing and disposal (SW) 2011
- Excellent demand for all traditional recycling commodities and less than 10 percent total residuals require very expensive disposal (B) 2021
- All tires are recycled and zero land filled (SW) 2021
- Glass recycling opportunities within 50 miles of every city in the state (B) 2041
- 100 percent of electron recycled (SW) 2051

STRATEGIES

Financial Incentives and Disincentives

- Tax credits for businesses for recycling and re-use goals (effective strategy) (G)
- Tax credits and reduced garbage bills for recycling (G)

Materials Processing and Management

- Implement commercial recycling opportunities in urban areas - local strategies and incentives (SW)
- Recycling operators should be encouraged to employ best available technology, promote consistent approach in state (SW)

Regulatory Action
- Prohibit landfilling of tires (SW)
- Re-impose fee on each tire sold (SW)

Technological Solutions
- Research and development to separate composite materials in tires (SW)

ADDRESSING SPECIAL WASTES (ISSUE PAPER 1)

Within 10 years, convenient and inexpensive systems will be in place for diverting household hazardous materials statewide. Incentives will be in place to reduce/deter the generation of these wastes. There will be facilities to treat or recycle various "problem" wastes, e.g., medical, tires, industrial wastes, and heavy metals. All infectious biomedical waste will be treated and/or recycled.

MILESTONES

- We need facilities to destroy or recycle various "problem" wastes (medical, tires, industrial wastes, metals) (SW) 2001
- Advance Disposal Fee (ADF) applied to toxic products to handle 'recycling' or disposal costs so that costs are distributed more equitably (G) 2003
- Audit toxic waste recycling - oil gallons, paint gallons, batteries (SW) 2003
- Increase financial assurance requirements for facilities that dispose or recycle solid and hazardous waste (SW) 2003
- Convenient and inexpensive systems are in place for dropping off household hazardous materials statewide (SW) 2006
- All infectious biomedical waste is treated and/or recycled (SW) 2011
- Local business to process specific waste classification - usable products, e.g., margarine containers (C) 2031

STRATEGIES

Materials Processing and Management
- Auto fluids, paints, stains, solvents, and batteries, use a convenient one-time use system to collect auto fluids - PAC -Lake- to processor (G)
- Continue state assistance to develop and operate safe household a hazardous waste event and sites (G)

Regulatory Action
- Establish a state program on overseeing biomedical waste treatment and disposal. Guidelines at a minimum, regulations at a maximum and a full-time state technical assistant (G)
- Require reliable destruction of infectious / biomedical waste (SW)
- Simplified permitting process for proven technologies to recycle or destroy problem wastes (SW)
- Simplify regulatory process to allow for recycling or disposal of residual wastes from treatment processes (SW)

Technological Solutions
- Clean incinerator or particle disintegrator (future technology) energy derived as product (CC)

Producer Responsibility
- Require industries that produce "problem" wastes to develop, pay for, and maintain disposal sites or alternatives (B)

Incentives and Disincentives
- Encourage development and use of new technologies (SW)

Financial Incentives and Disincentives
- Financial incentive, tax, grants, etc., for facilities that can destroy or recycle problem waste with high efficiency, environmental protection (SW)

CHANGE BEHAVIOR AND ATTITUDES

Government and media will cooperate to increase public awareness about solid waste solutions that reduce, reuse, and recycle materials immediately and ongoing. Within 10 years, education regarding sustainable solid waste will occur at all levels and be fully integrated into 50 percent of school districts' curricula. All government facilities such as schools, prisons, and institutions will integrate principles of sustainability into operational structures. A community education plan will be implemented to inform the public of product stewardship, waste reduction methods, and recycling practices, and communities will work with industry to change the current culture of packaging. Society will be less focused on consumerism and consumer products will be "low impact."

MILESTONES

- Community education plan implemented to inform public of product stewardship, waste reduction methods, and recycling practices (G) 2001
- Maximize education at all levels, including using senior citizens to teach kindergarten through sixth grade on recycling (C) 2003
- Work with industry to change the current culture of packaging (C) 2006
- Environmental education will be fully integrated into 50 percent of school districts' curriculums (SW) 2011
- 50 percent of schools will be "sustainable" growing as much of own food as possible, composting, recycling, using recycled content paper, etc. (SW) 2011
- Reduce road building to increase reliance on local resources and provide some obstacle to consumerism (SW) 2021
- A non-consumeristic society, devoid of demand for fashions, pop culture products, and automotive independence (C) 2061
- A society with high tech information exchange and 'low tech' consumer products (C) 2061

STRATEGIES

Consumerism

- It is 'cool' to have native landscaping instead of lawns, many do it (G)
- Consumers demand long life products that are easy to repair if necessary (G)
- Presents will rarely be given (birthday, Xmas) and if they are they will not be material goods, but instead gifts of time, tickets, consumable items, food, etc. (G)
- Work on strategy to move people toward maintaining, repairing, sharing equipment, appliances, and other consumer goods (G)

Partnerships

- Community education, get businesses to partnership on education (G)

Education

- Washington state adopt and implement Clark County's Earth Saver, students auditing and verifying energy and resource use school program (contact Pete DuBois) (G)
- Emphasize public awareness on truth of chemical use. Are they really necessary? (G)
- A media campaign to cut down demand for superfluous stuff (CC)

Regulatory Action

- Environmental education mandated by statewide directive from Superintendent of Public Instruction (G)

Marketing

- Establish long-range social marketing strategy to move people toward fewer automobiles and more transportation alternatives (G)
- Local marketing package for agricultural products (CC)
- Advertising of junk food and soft drinks eliminated from schools, not relied on for school funding (CC)

Materials Processing and Management

- Composting yard waste, paper and cellulose packaging (G)

Producer Responsibility

- Companies voluntarily minimizing pollution exempt from regulations, polluters pay in fines and regulatory fees (G)

Comments and Concerns

- Don't separate change behaviors from other topics, its integral to ALL topics (SW)
- Legislative regulatory hammer (SW)

PRODUCT STEWARDSHIP (ISSUE PAPER 7)

Within 10 years, voluntary product stewardship activities will be implemented by more and more companies within key industries. Government will provide incentives and use regulations to limit packaging and chemicals, increase take back programs, upgrade durable goods and utilize recyclable packaging materials. Within this 10 year period, feasible options will be established that provide for product stewardship strategies such as repair and/or upgrade of durable goods, e.g., autos and electronics. Within 30 years, product stewardship will be the norm and regulations will be adopted. At least 50 to 75 percent or more of products will be repairable and/or upgradeable and reusable.

MILESTONES

- Law limiting packaging or requiring stores to take back packaging (SW) 2006
- Require all package material to be recyclable; require the manufacturer to provide the material; require that manufacturer to use the material (B) 2006
- Small businesses can send computers back to the company they came from (B) 2006
- Product stewardship is a common practice among all manufacturers (more than collection (G) 2011
- 25 percent of products (electronics, autos, durables) are repairable and upgradeable (G) 2011
- Products that will take back their own package, or expired product (C) 2011
- Legislature adopts product stewardship regulation, manufacturer product liability (G) 2011
- Product stewardship practices are implemented by 75 percent of business sector (G) 2011
- Incentives and/or regulations are in place to achieve product stewardship for 20 percent or chemical products (G) 2011
- Voluntary product stewardship activities are implemented by key industries, defined by toxicity, type of product/waste, and recoverability (G) 2011
- 50 percent of products are repairable and upgradeable (G) 2021
- Product stewardship becomes the norm (G) 2021
- "Cradle to cradle" responsibility of the manufacture for the product produced (SW) 2021
- Incentives and/or regulations are in place to achieve product stewardship for 50 percent of chemical products (G) 2021
- Legislative packaging requirements for manufacturers to be responsible for all products produced (SW) 2021
- 75 percent of products are repairable and upgradeable (G) 2031
- Mandatory product stewardship activities are implemented by remaining industries (G) 2031
- Eliminate packaging in 60 years; for example, computers can be distributed without packaging (C) 2061

STRATEGIES

Regulatory Action

- Law mandating synthetic Styrofoam illegal (use & manufacturing) (G)
- Work on strategy on limiting packaging or requiring stores to take back packaging or require packaging to be recyclable (G)
- If there is a recycling system, require it to be recycled, "BAN", this makes for development (SW)

Producer Responsibility

- Potato chips, etc. must be packaged in recyclable containers (G)
- Work on strategy for 'cradle to grave' responsibility of manufacturers for all products that lead to waste (hazardous products, too) (G)

Financial Incentives and Disincentives

- Environmental surcharges to fund package reduction programs (CC)
- Tax incentives for businesses that take back their own packaging, but only if the business reuses a large part of the returned packaging (B)
- Discourage planned obsolescence with incentives for companies manufacturing reusable recyclable components in their products (SW)

Materials Processing and Management

- Less flow control (SW)
- Government point of recycling, need place to clear ideas (SW)

Technological Solutions

- Provide wide Internet access by making it easy to reformat, refab, and redistribute HMD PCs (CC)

WASTE PREVENTION (ISSUE PAPER 6)

Waste generation rates will be reduced. Wastes that are generated can be handled by alternative processes that utilize the materials for other production activities, and the net environmental benefit is maximized. Within 10 years, 'zero waste' will be defined in a realistic and acceptable manner. Within 20 years, product packaging, including fast food, will be re-useable. Within 30 years, non-essential packaging will be reduced by 80 percent.

MILESTONES

- Methods to reduce waste so it is also useable as a raw material (G) 2001
- More bulk markets for food and home goods (C) 2003
- Public, government, and business have realistic understanding of parameters for "zero waste" ideal Define zero waste in a realistic and achievable manner (SW) 2003
- If we can't reach zero then define what is achievable, attainable, or acceptable (SW) 2003
- A useful measure of waste prevention is developed, leading to funding for waste prevention programs (C) 2006
- Reduce product packaging by 25 percent in 10 years and an additional 25 percent in 15 years (G) 2011
- Biodegradable, with or without UV packaging, for 25 percent of all packaging (SW) 2011
- People spend less (in real dollars) on garbage and recycling than they spent in 2000, but with increased diversion and/or through-source reduction (C) 2021
- Reduce non-essential packaging by 80 percent (not needed for health, safety, or product integrity) (SW) 2021
- Disposable fast-food packaging is displaced by generic re-usable containers, with a deposit/refund system for cups, clamshells, etc. (C) 2041
- No paper (C) 2041
- Zero waste (B) 2061

STRATEGIES

Consumerism

- Everyone's brief case or backpack will always include a reusable coffee cup and a washable napkin (G)
- Coffee shops use permanent cups (stainless steel) that customers bring back (G)
- Fast food restaurants also uses returnable (Tupperware, stainless) containers that customers bring back and are served in (G)

Financial Incentives and Disincentives

- Fast food restaurants give discounts if you bring your own containers (G)
- Put in place sliding scale pricing for garbage disposal with severe financial penalties for excess waste generated (B)
- Aluminum can and glass bottle recycling and deposit system in effect (SW)

Regulatory Action

- Label all sale items percent of post and pre recycled content (SW)
- Require all packages to state true costs of recycling (SW)

Technological Solutions

- Digital signature for legal documents (CC)
- Milestone 10 year: all Government documents available on a service with only a few paper copies available for archive (CC)

Comments and Concerns

- Dispute methods to allow questions to be addressed without come back problems (SW)

ACTUAL / COMPLETE COSTS OF SOLID WASTE (ISSUE PAPER 10)

Information on the true costs of solid waste will be provided to the public through education and labeling. Virgin material subsidies will be removed and environmental costs will be added in. 50 percent of the costs of waste disposal of products will be internalized and included in the prices of products. Within 30 years, 75 percent of the costs of waste disposal of products will be internalized and included in the prices of products. Within 60 years, 100 percent of the costs of waste disposal of products will be internalized and included into the prices of products.

MILESTONES

- Materials' pricing reflects true costs. Virgin material subsidies removed, environmental costs added in (G) 2003
- Gas will be $6/gallon. Local options become more do-able due to increase in transportation costs (B) 2006
- On-route weighing of waste becomes the norm; rates are based more on volume and weight, less on cost-of-services (C) 2011
- 50 percent of the costs of waste disposal of products are internalized and included into the prices of products (G) 2021
- 75 percent of the costs of waste disposal of products are internalized and include into the prices of products (G) 2041
- 100 percent of the costs of waste disposal of products are internalized and included into the prices of products (G) 2061

STRATEGIES

Full Cost Accounting

- Washington state needs to adopt GDP standards from "Redefining Progress". Subtract out negatives once industry is viewed as a drain on economy. They will change, i.e., oil spills GDP, new prisons GDP, and pesticide sales (G)
- Government required to use full cost accounting system, which currently is only tracked by money. It needs to include: environmental costs; liability; disposal; manufacturing; and waste and health impacts. Move to sustainable green accounting (G)
- UTC opens NOI on full cost accounting (G)
- Waste handling costs are set that are related to volumes produced 2005 (SW)

Financial Incentives and Disincentives

- US Department of Transportation establish federal grant to aid start up bio-diesel companies (G)
- Integrate costs/ ADF will be limited to specific products where it makes sense such as electronics (SW)
- Revise cost assessment guidelines (UTC) (G)

Procurement Standards

- Washington state government establishes bio-diesel purchasing contract (G)t

Funding

- Reduce reliance on solid waste tip fees to fund solid waste management activities, shift to more broadly based funding strategy(CC)

Comments and Concerns

- 50 percent of costs internalized sounds good, but how? Look into including costs and how that affects consumer and/or manufacturer (G)

RESEARCH & DEVELOPMENT

[Selected but not revised due to lack of time in Meeting 4]

Within 10 years, research programs will be in place for generating new products from what are currently 'problem' solid waste items. There will be research and civic involvement in recycled product development. Within 30 years, government will conduct research to help businesses develop non-hazardous materials that work as well or better than chemicals now being used.

MILESTONES

- Development of research programs to generate new products from presently "problems" solid waste items (C) 2003
- Recycled product development - research and civic involvement (C) 2003

- Government research to help businesses develop non-hazardous materials that work as well or better than chemicals now being used (B) 2031
- Research and development fund to create new ways to make current products (B) 2031

STRATEGIES

Producer Responsibility

- Work on helping research get done regarding new products that would replace products that become 'problem wastes' (G)

Financial Incentives and Disincentives

- Grants, etc. for anyone with great applicable ideas (G)
- Government grants or fellowships for solid waste 'mining' waste product alchemy, supported by product license fees (CC)
- Government subsidies for non-hazardous materials that work as well or better than chemicals now being used (B)

LANDFILLING AND INCINERATION (ISSUE PAPER 9)

[Selected but not revised due to lack of time in Meeting 4]

Within 10 years, 50 percent of abandoned landfills will be identified and cleaned up. No new landfills will be created and abandoned landfills will be mined for resources. Within 30 years, 90 percent of abandoned landfills will be cleaned up. Within 60 years, landfills will be eliminated and solid waste will be converted to building and construction materials.

MILESTONES

- Special state fund is set up using LTCA to clean up chronic dumping sites. State places liens on the property to recover costs. (G) 2006
- Seed landfills with bacteria (paper, oil, solvents, grass clippings) (SW) 2006
- Mining of landfills (G) 2011
- Quit making landfills so as to encourage the re-use of existing solid wastes (B) 2011
- 50 percent of abandoned landfills are identified and cleaned up (G) 2011
- Shred waste that can't be diverted, and remove metals, plastics, and compost (SW) 2011
- Landfills are mined for resources. Cells are designed for storage of material/resources until a technology is developed for their reuse (G) 2021
- 100 percent of recovery (G) 2021
- 90 percent of abandoned landfills are cleaned up (G) 2021
- Eliminate landfills. Convert solid waste to building materials and construction materials (C) 2061

STRATEGIES

Regulatory Action

- Ban construction of new incinerators (G)
- Phase out existing incinerators, except liquid H.W. (G)
- Clean up of chronic sites, establish dedicated state funds to clean up chronic dumpsites, not landfills (G)

New Data and Measurement Tools

- Establish statewide baseline of abandoned landfills, so sites can be ranking for clean up or mining priority (G)

Funding for Government Programs

- Clean up of old dumps, establish clean up fund for clean up or mining of ranked abandoned landfills, source is LTCA or other sources (G)

Technological Solutions

- Microbes to seed at landfills to reduce paper and cellulose packaging materials (G)
- Seed landfills with bacteria and clean up with mining (G)
- Energy recovery verses natural gas, electric and oil (SW)

Financial Incentives and Disincentives

- Create program that easily allows Ecology to place liens on these sites to recover costs (G)

CONSUMER AND INDUSTRY INCENTIVES

[Selected but not revised due to lack of time in Meeting 4]

Within 10 years, there will be more financial incentives for businesses and homeowners to recycle. There will be tax incentives (rewards) to produce low-impact products and there will be incentives for local community to minimize the impact of waste on ground water.

MILESTONES

- Tax incentives (rewards) to produce low-impact products (B) 2003
- Incentives for local community that will support the environment e.g., effect of waste on ground water (C) 2003
- Create more financial incentives for businesses and homeowners to recycle (SW) 2003
- Subsidies for gas and oil extraction are eliminated, clean air programs are strengthened (C) 2006
- Increase curbside recycling by promoting economic benefit to consumer (i.e., $0.05/lb. newspaper) (G) 2006

STRATEGIES

Regulatory Action

- Cities and counties mandate that commercial garbage haulers offer recycling to their customers with the cost for recycling rolled into the garbage rates (G)

Financial Incentives and Disincentives

- Tie clean air credits/ pollution reduction programs to energy generation technology development (CC)
- Create financial incentives and economic certainty - need to invest in infrastructure for increased recycling by private sector (SW)

Comments and Concerns

- Regulatory barriers exist to implement and purchase new technologies, solid waste industry profit/fee
- Business as well as recycling service / facility providers (SW)

MILESTONE TOPICS NOT INCLUDED IN THE KEY 12

STATE AND LOCAL SOLID WASTE PLANNING (ISSUE PAPER 2)

Within the next year, the purpose of this State Solid Waste Plan will be clear, and there will be clear definition of solid waste planning goals and interim steps to reach those goals. Within 10 years, clarification on the definitions of 'product' versus 'waste' will improve the regulatory system and allow for an increase in re-usable products. Also, business and government will work together on solutions, government will have a timely problem-solving communication response system in place.

MILESTONES

- Increase measurable solid waste goals and progress checks toward "sustainability" (SW) 2001
- Clear definition of solid waste planning goals and interim steps to reach those goals. Clarify the purpose of this plan (SW) 2001
- Consistency in solid waste facility requirements from one county to another (SW) 2001
- Business and government working together on solutions - really (B) 2003
- State grants (funding) reserved for local agencies to administer local education (G) 2003
- Business/government: problem solving board of review; fairness model, e.g., SBA 30 day response communication; working together (B) 2003
- Clear definitions of product and waste to improve the regulatory system and allow for increase in re-usable product (SW) 2003
- Need to be able to quantify effectiveness of programs supported by grant funds. (SW) 2003
- Continue/increase funding for programs that work (SW) 2003
- Clear definition of 'product' vs. 'waste' (SW) 2006
- More open competition for commercial garbage hauling and recycling competitive classifications (B) 2006
- Improved measurement strategies for recycled, recovered, re-use, and data for our annual recovery rates (G) 2006

STRATEGIES

Stakeholder Involvement

- Special meetings on plan vision and goals led by Ecology (G)

Market Development

- Create marketing plan to sell waste as a feeder stock for manufacturing (G)

Regulatory Action

- Put teeth into public policies (CC)

Materials Processing and Management

- Government clarifies what the long-term sub streams for collection will be so that investments can be made and recovered, i.e., don't suggest implement curbside yard debris programs and then decide to shift to 100 percent on site composting of newspaper. (SW)

Partnerships

- Meetings with business community to gain partnerships (G)

RECYCLABLE PRODUCTS (ISSUE PAPER 11)

Within 10 years, all producers will use 50 percent recycled material in manufacturing and 100 percent of paper products will be produced with pulp from hybrid cottonwood and recycled paper. Within 30 years, all electronics will be able to be easily recycled and re-used, and all tires will be recycled into new tires.

MILESTONES

- All producers must use 50 percent recycled material in manufacturing (SW) 2006
- 100 percent of paper products produced with virgin pulp from hybrid cottonwood and recycled paper (G) 2011
- Tires, 100 percent recycled into new tires (B) 2021
- All electronics can be easily recycled and re-used (B) 2031

STRATEGIES

Technological Solutions

- How about glass bottle reuse redemption. Glass may no longer be competitive in 2041, bioplastics containers (G)

Regulatory Action

- Bottle bill, a recent garbage audit at Pacific Middle School turned up 300 plastic drink bottles ! At 180 school days = 54,000 bottles to dump. With 100 schools in Clark County that equals 5.4 million bottles per year! (G)
- Federal bottle bill (for all beverages) (G)
- Implement mandatory electronics take-back program 2005 (SW)

Technological Solutions

- 100 percent products from recycled paper; engineering to make paper products with integrity strength like virgin (G)

Education

- Educate students NOT to drink sugar water set up free water purified systems (G)
- Schools can track number of bottles and cans from vending companies and calculate recovery rate (G)

Producer Responsibility

- Implement a take back program similar to Germany's green dot (G)
- Certify electronics products that are recoverable 2002 (SW)

New Data and Measurement Tools

- Recycling facilities should be required to report the tonnages of materials collected so local jurisdictions can calculate recycle rates (G)

Procurement

- Government needs to buy recycled. Clark County currently only buys 5 percent recycled copy paper, 95 percent virgin. Cost for virgin is $2.14 ream, King County pays $2.47 ream recycled. (G)

Materials Processing and Management
- Local community collection day for special solid material for recyclers such as margarine tub day or disposable razor day (CC)

Financial Incentives
- Producers using 50 percent recycled materials in manufacturing, grants, and incentives to businesses to pilot these programs and increase their use (G)

Comments and Concerns
- Why limit hybrid cottonwood, what about hemp, kenaf, bamboo, etc. (G)

RECYCLING SERVICES (ISSUE PAPER 11)

Within 10 years, recycling and recovery services will be available statewide to almost all of the population within a five to 10 mile radius. Inefficiencies in recycling collection will be reduced or removed, recycling services will be available for broader variety of waste types, and transfer stations will have automated separation. Effective food waste recycling programs will be available in cities with a population over 25,000.

MILESTONES

- Recycling and recovery services are available in 100 percent of the state (G) 2001
- Reduce or remove obstacles to efficiencies in recycling collection - i.e., allowed to mix residential and business recycling together in the same load (SW) 2001
- Rural and small community recycling by having local drop boxes (G) 2006
- Recycling services available in all counties (SW) 2006
- Recycling accessible to 100 percent of population within 5 mile radius (G) 2006
- 90 percent of population is within 10 miles of recycling center (G) 2006
- Automate separation at transfer stations - plastic, paper, box material, glass, metal, etc. (SW) 2006
- Effective food waste recycling programs available in all cities over 25,000 population (SW) 2006
- Recycling services are readily available in every part of the state (SW) 2011
- Recycling services are available for broader variety of waste types (beyond glass, paper, yard waste, plastics, etc.) Now "mainstream" (SW) 2011
- Industrial and municipal waste industry is focused almost exclusively on regional material re-use/recycling, not disposal (B) 2051

STRATEGIES

Regulatory Action
- UTC NOI on combining commercial and residential recycling in same truck (G)
- UTC issue policy statement about commercial and residential recycling in same truck (G)
- State laws to make availability of recycling opportunities for public easier, more convenient (B)

Market Development
- Implement and sustain local market development programs around the state 2005 (SW)

Full Cost Accounting
- Cost of recycling service reflected in customers' bill (SW)

WASTE DISPOSAL REDUCTION (ISSUE PAPER 5)

Within 10 years, waste per-capita disposal will decrease by 30 percent. Deposit and advanced-disposal-fee legislation will be passed.

MILESTONES

- Waste disposal goes down by 10 percent (G) 2003
- Deposit-legislation and advanced-disposal-fee advocates pass comprehensive, progressive bill (C) 2006
- 30 percent of current per-capita solid waste disposed. 70 percent of solid waste to re-use, compost, or recycled. (B) 2011
- Washington Minimum Residual Value Bill (like a bottle bill, except it encompasses all products with limited product life and their containers) (C) 2011
- The number of trucks collecting "stuff" in neighborhoods are down to one per week; requires better efficiency and source reduction (C) 2031

STRATEGY

Technological Solutions

- Creating fuel, if possible, work to use right away, jump on it (G)

WASTE GENERATION

Within 10 years, a fuel will be created out of packaging material. Within 20 years, waste generation will be reduced by 60 percent.

MILESTONES

- Creating a fuel out of paper - plastic packaging material. (SW) 2003
- In 20 years, reduced waste generation by 60 percent (C) 2021
- Total pounds/hh/yr down by 25 percent of 2000. When the economy is good, and when it is bad, people generate less waste and recyclables (C) 2021

STRATEGY

Funding for Government Programs

- Graduated tip fees based upon environmental impact and product separation (CC)

www.ecy.wa.gov/programs/swfa/swplan

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